

AL. 2.1986-1667

AIR MONITORING REPORT  
CITY OF ST. ALBERT  
SUPPLEMENTARY DATA REPORT  
FEBRUARY 1 TO MARCH 31, 1979

# POLLUTION CONTROL DIVISION



Alberta  
ENVIRONMENT

7329394



AL. 2. 1986-1667

LOUISIANA  
C2  
DEC 14 1982

AIR MONITORING REPORT

CITY OF ST. ALBERT

SUPPLEMENTARY DATA REPORT

FEBRUARY 1 TO MARCH 31, 1979

1. WIND DATA

2. MONITORING EQUIPMENT DATA

February 01 - 28

March 01 - 31

7329394



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February 01 - 28

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# ABSTRACT

Air Quality information as monitored by Alberta Environment in the City of St. Albert during the period of February 1 to March 31, 1979, is contained in this report. This supplementary data report is to be used in conjunction with the Summary Report.

Summary

All quality information as contained in this report is the property of the U.S. Government and is not to be distributed outside the agency to which it is furnished. This report is the property of the U.S. Government and is not to be distributed outside the agency to which it is furnished. This report is the property of the U.S. Government and is not to be distributed outside the agency to which it is furnished.



## WIND DIRECTION AND WIND SPEED (KNOTS)

PERIOD: 1 - 24, 1974

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
2	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
3	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
4	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
5	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
6	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
7	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
8	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
9	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
10	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
11	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
12	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
13	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
14	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
15	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
16	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
17	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
18	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
19	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
20	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
21	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
22	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
23	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
24	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
25	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
26	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
27	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C
28	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	SE	SE	SE	SE	C	C	C	C	C	C	C

## I. WIND DATA



## WIND DIRECTION AND WIND SPEED (KM/H)

FEBRUARY 1 - 28, 1979

DAY

Y	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	C	C	C	C	SE	SE	SE	S	C	C	C	C	C	SE	SE	S	S	C	C	C	C	C	C	C
2	0	0	0	0	3	5	7	3	0	0	0	0	0	7	7	3	3	0	0	0	0	0	0	0
3	0	0	0	0	3	3	3	5	9	14	14	11	12	16	12	18	18	16	18	16	16	18	18	18
4	E	C	S	SE	SE	S	SW	S	W	C	W	C	C	C	C	C	E	E	E	E	E	E	E	E
5	7	0	9	3	7	3	3	3	5	0	0	0	0	0	0	5	9	11	14	14	18	20	20	20
6	E	E	E	E	E	E	E	E	E	NE	E	E	E	N	N	N	NW	NW	NW	NW	N	N	N	NW
7	22	18	22	20	22	16	18	20	16	11	7	9	7	11	14	11	14	16	22	18	24	25	22	22
8	N	N	NW	N	N	NW	NW	C	C	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
9	18	12	16	12	7	7	7	0	0	7	11	14	14	18	18	14	11	7	11	14	11	14	22	22
10	SE	E	E	E	E	SE	E	E	SE	E	NE	NE	NE	N	N	N	N	N	NW	NW	NW	NW	NW	NW
11	22	22	25	27	25	33	24	25	24	7	11	11	11	12	11	11	11	12	14	20	22	18	33	14
12	NW	NW	NW	NW	NW	NW	NW	N	C	C	C	C	C	C	C	E	E	E	E	E	E	E	E	E
13	16	12	14	16	25	14	18	16	5	0	3	0	0	0	0	3	5	9	7	11	14	16	18	24
14	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
15	22	25	25	25	22	25	22	20	22	18	18	20	18	14	20	18	18	14	11	11	11	11	12	3
16	NW	N	N	NW	N	NW	N	N	NW	N	NW	NW	NW	NW	NW	N	N	N	N	N	N	N	N	N
17	16	7	9	5	7	5	9	12	14	12	14	14	14	14	9	12	14	14	14	14	7	11	11	7
18	N	C	NE	E	NE	NE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	NE	NE	NE
19	7	0	5	11	14	14	16	18	16	14	12	9	12	14	12	11	11	9	12	14	16	18	18	18
20	NE	NE	NE	NE	N	NE	N	N	N	NW	NW	NW	N	NW	N	C	C	C	E	NE	NE	E	NE	NE
21	16	16	16	14	7	7	9	9	7	9	7	7	9	7	9	0	0	0	0	9	11	11	12	14
22	NE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
23	16	18	18	20	18	18	20	22	24	22	20	22	22	18	22	22	22	22	20	20	18	16	16	14
24	N	N	N	N	NW	N	N	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
25	14	12	12	12	14	18	18	22	22	25	25	24	12	14	18	18	18	22	24	24	18	18	3	14
26	NW	NW	NW	W	NW	NW	N	C	E	C	E	E	E	E	E	SE	SE	E	E	SE	SE	SE	SE	SE
27	11	11	9	7	3	7	7	0	3	0	3	7	5	7	7	9	9	14	25	29	29	29	29	27
28	E	E	E	E	E	E	E	SE	E	E	E	E	E	E	E	SE	E	E	SE	E	E	E	E	E
29	24	24	27	25	24	24	24	25	18	22	20	20	16	16	16	14	16	18	14	12	12	9	12	11
30	SE	E	E	SE	C	NE	NE	NE	E	C	N	C	W	NW	W	W	C	W	C	NE	E	E	E	E
31	16	12	7	12	0	5	7	7	7	0	7	0	7	7	12	9	0	7	0	5	5	0	9	11
32	E	E	E	E	E	E	E	SE	E	E	E	E	E	E	E	SE	E	E	SE	E	E	E	E	E
33	24	24	27	25	24	24	24	25	18	22	20	20	16	16	16	14	16	18	14	12	12	9	12	11
34	SE	E	E	SE	C	NE	NE	NE	E	C	N	C	W	NW	W	W	C	W	C	NE	E	E	E	E
35	16	12	7	12	0	5	7	7	7	0	7	0	7	7	12	9	0	7	0	5	5	0	9	11
36	E	E	E	E	SE	SE	E	E	E	C	E	NW	NW	NW	NW	C	N	C	NW	NW	N	NW	NW	NW
37	14	18	20	20	12	11	9	5	3	0	5	7	9	11	9	0	7	0	5	7	12	12	11	11
38	NW	N	NW	W	W	W	C	W	C	C	S	S	S	S	S	SW	SW	N	NW	C	NE	C	NE	NE
39	7	7	7	5	7	7	0	5	0	0	5	5	7	7	3	3	5	3	1	0	5	0	1	5
40	NE	E	N	N	NE	NE	NE	E	E	E	E	E	C	E	SE	SE	S	S	W	C	C	W	W	
41	3	7	9	5	3	7	5	7	3	7	9	3	0	3	7	5	11	11	3	0	0	11	16	
42	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	N	NW	NW	W	N	N	N	N	N	N	N	NW	NW	NW
43	16	14	14	16	18	22	18	22	20	22	18	7	14	18	16	16	16	16	16	16	20	18	18	18
44	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	NE	N	NE	NW	N
45	16	11	9	14	16	11	5	11	14	12	14	14	11	12	11	9	11	11	11	7	14	7	7	11
46	N	N	N	N	NE	NE	C	C	C	C	C	C	C	C	C	E	E	E	E	E	NE	NE	NE	NE
47	9	9	7	5	20	1	0	0	0	0	0	0	0	0	0	5	5	5	7	11	12	12	14	
48	NE	NE	E	SE	E	E	E	E	E	E	E	E	C	E	E	E	SE	SE	SE	E	E	E	E	E
49	12	14	11	7	5	3	3	3	7	5	5	5	5	5	3	3	3	3	3	9	5	11	14	14
50	E	SE	SE	E	SE	SE	SE	E	E	E	E	E	E	F	E	E	E	E	C	N	NE	NE	E	NE
51	18	20	22	18	18	14	20	11	14	12	11	12	12	16	18	20	18	22	18	24	24	29	33	29
52	E	E	E	NE	C	E	SE	E	E	E	NW	E	NW	W	W	W	W	W	W	W	W	W	W	W
53	7	5	7	5	0	7	1	12	1	7	24	5	12	16	18	20	18	22	18	22	22	14	11	9
54	W	W	W	NW	N	N	NE	NE	NE	NE	E	E	E	E	E	E	E	E	E	E	E	E	E	E
55	7	12	14	20	18	14	12	7	14	14	9	12	18	20	22	20	18	22	18	24	24	29	33	29
56	E	E	E	E	E	NE	NE	NE	NE	NE	NE	N	N	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	W
57	25	22	25	22	18	14	18	18	14	11	12	11	7	5	11	11	11	14	16	18	18	12	11	5





## WIND DIRECTION AND WIND SPEED (KM/H)

MARCH 1 - 31, 1979

DAY

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	W 5	NW 3	C 0	C 0	S 3	SW 7	SW 7	S 3	S 3	S 3	S 7	S 3	C 0	C 0	C 0	C 0	C 0	SE 5	SE 7	S 7	C 0	NE 5	E 5	NE 9
2	NE 9	NE 9	NE 11	N 9	C 0	NE 7	NE 11	NE 11	N 7	N 7	N 7	N 3	NE 3	NE 5	C 0	C 0	C 0	C 0	C 0	12	14	12	16	14
3	S 14	SE 12	S 18	S 20	S 24	S 25	S 25	S 25	SW 20	SW 22	SW 22	SW 22	SW 22	SW 22	SW 22	SW 22	SW 22	SW 20	SW 20	SW 18	SW 18	SW 18	SW 16	SW 16
4	SW 16	SW 16	SW 20	SW 20	SW 18	SW 16	SW 20	SW 16	SW 16	SW 14	SW 16	SW 16	SW 18	SW 18	SW 14	SW 16	SW 16	SW 18	SW 14	SW 11	SW 18	SW 16	SW 9	SW 16
5	S 16	SE 11	S 16	SW 18	SW 18	SW 18	SW 18	SW 18	SW 12	SW 14	SW 22	SW 14	SW 12	SW 9	SW 11	SW 20	SW 20	SW 25	SW 16	SW 14	SW 9	SW 7	SW 14	SW 16
6	C 0	S 1	C 0	S 7	S 5	S 7	S 7	S 7	S 11	SW 14	SW 16	SW 14	SW 14	SW 14	SW 14	SW 14	SW 12	SW 11	SW 11	SW 11	SW 5	SW 7	SW 12	SW 12
7	SE 11	S 11	S 1	S 9	S 5	SE 5	SE 11	S 14	S 14	SW 11	SW 18	SW 3	C 0	NW 25	NW 18	NW 16	NW 14	NW 22	NW 22	NW 25	NW 29	NW 27	NW 27	NW 27
8	NW 18	NW 20	NW 3	NW 29	NW 22	NW 24	NW 22	NW 44	NW 11	SW 14	SW 16	SW 14	SW 14	SW 14	SW 22	SW 25	SW 25	SW 29	SW 29	SW 29	SW 25	SW 24	SW 14	SW 14
9	N 24	N 16	N 14	N 14	N 7	N 9	N 7	N 9	N 11	SW 5	SW 1	SW 11	SW 12	SW 12	SW 7	SW 16	SW 16	SW 9	SW 12	SW 14	SW 16	SW 11	SW 5	SW 11
10	S 5	S 11	S 14	S 18	S 14	S 18	S 14	S 33	S 18	SW 18	SW 22	SW 22	SW 18	SW 22	SW 24	SW 18	SW 20	SW 24	SW 18	SW 18	SW 18	SW 14	SW 16	SW 18
11	W 16	NW 11	N 14	N 3	NW 7	NW 11	NW 11	NW 9	NW 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9	W 9
12	NE 5	NE 9	NE 11	NE 14	NE 11	NE 16	NE 14	NE 18	NE 16	NE 14	NE 7	NE 11	NE 18	NE 22	NE 25	NE 27	NE 29	NE 31	NE 33	NE 38	NE 35	NE 48	NE 46	NE 35
13	NW 35	NW 22	NW 18	NW 12	NW 12	NW 11	NW 7	NW 9	NW 12	NW 11	NW 11	NW 14	NW 18	NW 16	NW 14	NW 14	NW 14	NW 14	NW 12	NW 11	NW 3	NW 11	NW 12	NW 14
14	NE 14	NE 14	NE 18	NE 18	NE 14	NE 24	NE 18	NE 20	NE 22	NE 18	NE 22	NE 18	NE 16	NE 18	NE 18	NE 20	NE 22	NE 20	NE 24	NE 22	NE 20	NE 18	NE 11	NE 11
15	SE 16	SE 9	SE 5	SE 9	SE 11	SE 11	SE 0	SE 3	SE 5	SE 11	SE 9	SE 11	SE 7	SE 9	SE 7	SE 9	SE 5	SE 7	SE 14	SE 11	SE 12	SE 7	SE 3	SE 9
16	S 11	S 9	S 14	S 16	S 24	S 9	S 14	S 11	S 11	S 14	S 14	S 16	S 16	S 12	S 14	S 16	S 18	S 14	S 11	S 9	S 7	S 9	S 7	S 7
17	NW 7	NW 1	NW 0	NW 0	NW 0	NW 0	NW 3	NW 0	NW 0	NW 0	NW 0	NW 0	NW 0	NW 0	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3
18	SE 3	SE 5	SE 5	SE 3	SE 12	SE 5	SE 7	SE 1	SE 5	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3	SE 3
19	E 11	E 11	E 11	E 11	E 9	E 9	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3	E 3
20	SE 22	SE 3	SE 5	SE 9	SE 9	SE 11	SE 9	SE 9	SE 11	SE 9	SE 3	SE 5	SE 7	SE 7	SE 5	SE 9	SE 14	SE 16	SE 16	SE 14	SE 20	SE 18	SE 22	SE 18
21	SE 18	SE 11	SE 14	SE 11	SE 11	SE 7	SE 5	SE 5	SE 0	SE 3	SE 0	SE 0	SE 3	SE 0	SE 3	SE 9	SE 7	SE 3	SE 1	SE 3	SE 5	SE 9	SE 11	SE 18
22	NW 9	NW 11	NW 20	NW 18	NW 22	NW 14	NW 11	NW 11	NW 11	NW 11	NW 11	NW 11	NW 7	NW 0	NW 0	NW 5	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3	NW 3
23	S 11	S 11	S 7	S 16	S 18	S 22	S 33	S 14	S 22	S 18	S 14	S 20	S 20	S 22	S 20	S 22	S 20	S 12	S 3	S 3	S 3	S 7	S 9	S 12
24	SE 11	SE 14	SE 18	SE 14	SE 18	SE 16	SE 27	SE 22	SE 18	SE 14	SE 9	SE 14	SE 20	SE 35	SE 29	SE 27	SE 38	SE 53	SE 53	SE 55	SE 51	SE 42	SE 53	SE 53
25	NW 50	NW 46	NW 44	NW 48	NW 40	NW 40	NW 42	NW 33	NW 22	NW 35	NW 24	NW 27	NW 24	NW 22	NW 20	NW 24	NW 18	NW 16	NW 12	NW 11	NW 9	NW 7	NW 5	NW 5
26	N 7	N 3	N 3	N 1	N 5	N 1	N 0	N 0	N 0	N 3	N 3	N 0	N 0	N 0	N 0	N 0	N 3	N 3	N 3	N 3	N 3	N 3	N 3	N 3
27	NE 3	NE 1	NE 1	NE 9	NE 12	NE 1	NE 9	NE 9	NE 11	NE 11	NE 11	NE 12	NE 11	NE 7	NE 9	NE 7	NE 9	NE 3	NE 3	NE 3	NE 3	NE 3	NE 3	NE 3
28	W 14	W 14	W 14	W 12	W 12	W 12	W 20	W 18	W 18	W 22	W 24	W 24	W 24	W 37	W 29	W 29	W 25	W 29	W 33	W 22	W 22	W 14	W 11	W 11
29	NW 7	NW 9	NW 7	NW 5	NW 7	NW 7	NW 7	NW 7	NW 16	NW 14	NW 18	NW 24	NW 27	NW 37	NW 25	NW 29	NW 18	NW 24	NW 18	NW 20	NW 14	NW 14	NW 14	NW 14
30	N 12	N 11	N 12	N 11	N 14	N 14	N 14	N 14	N 18	N 18	N 18	N 18	N 18	N 18	N 20	N 25	N 18	N 18	N 18	N 16	N 12	N 18	N 16	N 16
31	E 16	E 11	E 11	E 9	E 11	E 7	E 11	E 9	E 7	E 9	E 7	E 9	E 7	E 9	E 7	E 9	E 7	E 9	E 7	E 9	E 0	E 11	E 9	E 12





## II. MONITORED POLLUTANT DATA



ALBERTA ENVIRONMENT  
DIVISION OF POLLUTION CONTROL  
AIR QUALITY CONTROL BRANCH

WIND FREQUENCY TABLE

STATION: ST. ALBERT SUMU

MONTH: FEB. 1979

INSTRUMENT TYPE: NAMAD STANDARD

DIRECTION	DEGREES	TOTAL HOURS	PERCENT	AVERAGE SPEED IN KM/H
N	338 TO 22	94	13.99	11.7
NE	23 TO 67	73	10.86	11.7
E	68 TO 112	245	36.46	14.4
SE	113 TO 157	49	7.29	13.8
S	158 TO 202	14	2.08	5.4
SW	203 TO 247	3	0.45	3.7
W	248 TO 292	31	4.61	11.3
NW	293 TO 337	97	14.43	14.4
CALM	0 TO 000	66	9.82	

AVERAGE WIND SPEED 13.2 KM/H

WIND INSTRUMENT OPERATIONAL 672 HOURS (100.00%)

AMBIENT AIR MONITORING REPORT FOR THE MONTH OF FEB. 1979

STATION: ST ALBER SUMU

POLLUTANT	MONITOR	RANGE MAX.	PEAK HOURLY	PEAK DAILY	MONTH MEAN	% OPER
SOILING INDEX		COH	0.4	0.15	0.03	94.8
NOX		PPM	0.55	0.17	0.06	97.8
NO2		PPM	0.09	0.05	0.03	94.5
NO		PPM	0.50	0.10	0.02	94.5
SO2		PPM	0.02	0.01	0.00	96.3
O3		PPHM	4.5	3.83	2.01	98.8
THC		PPM	3.0	1.75	1.58	30.1
CO		PPM	4.5	2.810	0.64	98.7

@ NOTE CARBON MONOXIDE CONTAINS PEAK 8-HR AVERAGE INSTEAD OF PEAK DAILY AVERAGE





# COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

POLLUTANT	REGULATIONS		NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
NO2	1-HOUR	0.21	0	0.0
	24-HOUR	0.11	0	0.0
SO2	1-HOUR	0.17	0	0.0
	24-HOUR	0.06	0	0.0
O3	1-HOUR	5.10	0	0.0
	24-HOUR	1.50	20	72.3
CO	1-HOUR	13.00	0	0.0
	8-HOUR	5.00	0	0.0

NOTE. COMPARISON TO 8-HOUR REGULATION WAS WITH TIME PERIODS 0001 - 0800  
0801 - 1600 AND 1601 - 2400

NOTE. COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

NOTE. OTHER POLLUTANTS NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS)  
REGULATIONS



# SUSPENDED PARTICULATE MATTER SOILING INDEX

## COEFFICIENT OF HAZE

SOILING INDEX STATION 1 SUMU MONTH FEB. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.13	8	0.08	8	0.25	8	0.15	24	0.4
2	0.06	8	0.03	8	0.04	8	0.04	24	0.2
3	0.00	8	0.00	8	0.03	8	0.00	24	0.0
4	0.00	8	0.00	8	0.03	8	0.01	24	0.1
5	0.08	8	0.00	8	0.00	8	0.03	24	0.2
6	0.00	8	0.01	8	0.00	8	0.00	24	0.1
7	0.04	8	0.11	8	0.08	8	0.08	24	0.2
8	0.01	8	0.03	8	0.05	8	0.03	24	0.1
9	0.00	8	0.00	8	0.00	8	0.00	24	0.0
10	0.08	8	0.01	8	0.00	8	0.03	24	0.1
11	0.00	8	0.00	8	0.00	8	0.00	24	0.0
12	0.01	8	0.11	8	0.01	8	0.05	24	0.4
13	0.00	8	0.00	8	0.03	8	0.01	24	0.2
14	0.03	8	0.04	8	0.10	8	0.05	24	0.2
15	0.08	8	0.04	8	0.01	8	0.04	24	0.1
16	0.04	8	0.06	8	0.04	8	0.05	24	0.2
17	0.00	8	0.01	8	0.00	8	0.00	24	0.1
18	0.00	8	0.01	8	0.03	8	0.01	24	0.1
19	0.00	8	0.10	8	0.10	8	0.07	24	0.4
20	0.03	8	0.08	8	0.09	8	0.06	24	0.2
21	0.06	8	0.00	8	0.00	8	0.02	24	0.1
22	0.00	8	0.05	8	0.04	8	0.03	24	0.1
23	0.01	8	0.00	8	0.08	8	0.03	24	0.1
24	0.15	8	0.06	8	0.00	8	0.07	24	0.3
25	0.00	8	0.00	8	0.00	8	0.00	24	0.0
26	0.01	8	0.09	8	0.04	8	0.05	24	0.4
27	0.00	8	0.00	5	0.0	0	0.00	13	0.0
28	0.0	0	0.0	0	0.0	0	0.0	0	0.0

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.4 ON DAY 1 1901 - 2000 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

C 0 / C 0 / C 0

PEAK CALENDAR DAY AVG. 0.15 ON DAY 1

ARITHMETIC MEAN 0.03 NO. RDGS. 637 HRS. (%OPER. 94.79%)

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	468	73.5	73.5
0.001 - 0.449	169	26.5	100.0
0.450 - 0.999	0	0.0	100.0
1.000 - 1.999	0	0.0	100.0
2.000 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## COEFFICIENT OF HAZE

DAY

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D  
A  
Y[illegible]





# SUSPENDED PARTICULATE MATTER SOILING INDEX

## COEFFICIENT OF HAZE

### FREQUENCY DISTRIBUTION TABLES

SOILING INDEX STATION 1 SUMU MONTH FEB. 79

#### PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	0	0.0
NE	0	0.0
E	0	0.0
SE	0	0.0
S	0	0.0
SW	0	0.0
W	0	0.0
NW	0	0.0
CALM	0	0.0
INOP	0	0.0

#### FREQUENCY OF READINGS WITH WIND DIRECTION

WIND DIRECTION	HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	92	0	0.0
NE	66	0	0.0
E	229	0	0.0
SE	49	0	0.0
S	14	0	0.0
SW	3	0	0.0
W	30	0	0.0
NW	88	0	0.0
CALM	66	0	0.0
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.5

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST. ALBERT SUMU



# SUSPENDED PARTICULATE MATTER SCILING INDEX

## COEFFICIENT OF HAZE

SCILING INDEX STATION 2 Mr. Smith's MONTH FEB. 79

DAY	0001-0800 AVE. NO.	0801-1600 AVE. NO.	1601-2400 AVE. NO.	FULL DAY AVE. NO.	DAILY PEAK
1	0.10	4	0.13	4	0.27
2	0.23	4	0.08	4	0.10
3	0.03	4	0.08	4	0.15
4	0.18	4	0.08	4	0.10
5	0.08	4	0.00	4	0.05
6	0.08	4	0.13	4	0.05
7	0.05	4	0.05	4	0.05
8	0.05	4	0.10	4	0.05
9	0.15	4	0.05	4	0.05
10	0.05	4	0.03	4	0.10
11	0.03	4	0.05	4	0.20
12	0.05	4	0.05	4	0.08
13	0.00	4	0.05	4	0.00
14	0.03	4	0.00	4	0.10
15	0.20	4	0.10	4	0.15
16	0.08	4	0.10	4	0.10
17	0.03	4	0.13	4	0.30
18	0.15	4	0.03	4	0.18
19	0.18	4	0.13	4	0.18
20	0.08	4	0.20	4	0.13
21	0.03	4	0.15	4	0.18
22	0.03	4	0.15	4	0.10
23	0.13	4	0.05	4	0.40
24	0.13	4	0.08	4	0.08
25	0.10	4	0.05	4	0.23
26	0.10	4	0.00	4	0.10
27	0.08	4	0.08	4	0.20
28	0.10	4	0.08	4	0.15

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.9 ON DAY 23 2001 - 2200 HOURS

PEAK CALENDAR DAY AVG. 0.19 ON DAY 23

ARITHMETIC MEAN 0.10 NO. RDGS. 336 HRS. (%OPER. 100.00%)

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	151	44.9	44.9
0.001 - 0.449	181	53.9	98.8
0.450 - 0.999	4	1.2	100.0
1.000 - 1.999	0	0.0	100.0
2.000 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED





# SUSPENDED PARTICULATE MATTER SOILING INDEX

## COEFFICIENT OF HAZE

SOILING INDEX STATION 2 Mr. Smith's MONTH FEB. 79

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1
2	0.4	0.4	0.0	0.0	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0
3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
4	0.2	0.2	0.1	0.1	0.0	0.0	0.4	0.4	0.0	0.0	0.3	0.3
5	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
6	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.3	0.3	0.1	0.1
7	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.2
9	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
10	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
11	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
12	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.2	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1
16	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.3	0.3
17	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1
18	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.0	0.0
19	0.2	0.2	0.1	0.1	0.0	0.0	0.4	0.4	0.1	0.1	0.1	0.1
20	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4
21	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0
22	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.5
23	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
24	0.3	0.3	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.1	0.1
26	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0
27	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
28	0.1	0.1	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
DAY	13	14	15	16	17	18	19	20	21	22	23	24
1	0.0	0.0	0.3	0.3	0.2	0.2	0.1	0.1	0.3	0.3	0.5	0.5
2	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2
3	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.3	0.3
4	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0
6	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
7	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
8	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
9	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
10	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0
11	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3
12	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0
13	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.1	0.0	0.0
15	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.0	0.3	0.3
16	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3
17	0.0	0.0	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.4
18	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.3	0.3
19	0.2	0.2	0.1	0.1	0.0	0.0	0.3	0.3	0.3	0.3	0.1	0.1
20	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.0
21	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2
22	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2
23	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.9	0.9	0.3	0.3
24	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2
25	0.0	0.0	0.1	0.1	0.0	0.0	0.5	0.5	0.3	0.3	0.1	0.1
26	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.3	0.3	0.0	0.0
27	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.0	0.0
28	0.0	0.0	0.3	0.3	0.0	0.0	0.4	0.4	0.2	0.2	0.0	0.0



# OXIDES OF NITROGEN - NOX SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE.	NO.	AVE.	NO.	AVE.	NO.	AVE.	NO.	PEAK
1	0.13	8	0.12	6	0.24	8	0.17	22	0.31
2	0.10	8	0.06	8	0.06	8	0.08	24	0.21
3	0.03	8	0.05	8	0.07	8	0.05	24	0.11
4	0.04	8	0.04	8	0.03	8	0.04	24	0.06
5	0.01	8	0.03	8	0.03	8	0.02	24	0.08
6	0.01	8	0.06	2	0.06	8	0.04	18	0.08
7	0.02	8	0.02	8	0.02	8	0.02	24	0.03
8	0.05	8	0.05	8	0.02	8	0.04	24	0.14
9	0.02	8	0.03	8	0.09	8	0.05	24	0.21
10	0.02	8	0.02	8	0.02	8	0.02	24	0.03
11	0.01	8	0.02	8	0.02	8	0.02	24	0.02
12	0.08	8	0.06	8	0.03	8	0.06	24	0.20
13	0.02	8	0.03	8	0.02	8	0.02	24	0.04
14	0.01	8	0.02	8	0.16	8	0.07	24	0.29
15	0.11	8	0.04	8	0.04	8	0.07	24	0.17
16	0.03	8	0.05	8	0.12	8	0.07	24	0.17
17	0.04	8	0.07	8	0.07	8	0.06	24	0.13
18	0.07	8	0.03	8	0.05	8	0.05	24	0.16
19	0.09	8	0.07	8	0.15	8	0.10	24	0.30
20	0.07	8	0.09	8	0.03	8	0.06	24	0.12
21	0.01	8	0.03	8	0.04	8	0.03	24	0.08
22	0.03	8	0.05	8	0.07	8	0.05	24	0.12
23	0.07	8	0.06	8	0.13	8	0.09	24	0.18
24	0.11	8	0.09	8	0.04	8	0.08	24	0.17
25	0.02	8	0.03	8	0.07	8	0.04	24	0.09
26	0.04	8	0.04	8	0.12	8	0.07	24	0.40
27	0.02	8	0.04	8	0.04	8	0.03	24	0.06
28	0.02	8	0.05	1	0.25	8	0.13	17	0.55

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.55 ON DAY 28 2001 - 2100 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

NW 18 / NW 18 / NW 12

PEAK CALENDAR DAY AVG. 0.17 ON DAY 1

ARITHMETIC MEAN 0.06 NO. RDGS. 657 HRS. (%OPER. 97.77%)

POLLUTANT NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS) REGULATIONS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	0	0.0	0.0
0.001 - 0.110	587	89.3	89.3
0.111 - 0.210	53	8.1	97.4
0.211 - 0.420	16	2.4	99.8
0.421 OR OVER	1	0.2	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED





## OXIDES OF NITROGEN - NOX SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

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Y	1	2	3	4	5	6	7	8	9	10	11	12
1	0.12	0.09	0.09	0.09	0.11	0.11	0.15	0.28	0.17	0.11	0.10	*****
2	0.21	0.17	0.08	0.05	0.08	0.07	0.08	0.10	0.10	0.06	0.06	0.06
3	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05
4	0.06	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.04	0.04
5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.03
6	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.05	0.05	*****	*****
7	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02
8	0.01	0.01	0.01	0.01	0.02	0.07	0.13	0.14	0.12	0.07	0.05	0.04
9	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
10	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
11	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
12	0.04	0.06	0.05	0.04	0.04	0.08	0.17	0.20	0.18	0.07	0.06	0.04
13	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.03	0.03	0.03	0.03
14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.04	0.02	0.03	0.02
15	0.17	0.12	0.10	0.09	0.09	0.08	0.13	0.14	0.06	0.05	0.04	0.04
16	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.05	0.07	0.06	0.04	0.05
17	0.05	0.04	0.06	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.05
18	0.08	0.14	0.16	0.10	0.04	0.03	0.03	0.02	0.02	0.03	0.02	0.03
19	0.08	0.08	0.08	0.08	0.08	0.10	0.11	0.10	0.11	0.10	0.09	0.06
20	0.05	0.05	0.05	0.06	0.08	0.09	0.08	0.10	0.10	0.11	0.12	0.10
21	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.03
22	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.12	0.12	0.09	0.03	0.03
23	0.07	0.06	0.05	0.04	0.04	0.05	0.11	0.17	0.12	0.09	0.07	0.06
24	0.13	0.12	0.11	0.10	0.12	0.09	0.09	0.13	0.12	0.17	0.12	0.09
25	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
26	0.04	0.03	0.02	0.01	0.02	0.02	0.09	0.08	0.07	0.05	0.04	0.03
27	0.06	0.02	0.01	0.01	0.01	0.01	0.02	0.04	0.05	0.04	0.04	0.04
28	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.05	*****	*****	*****

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Y	13	14	15	16	17	18	19	20	21	22	23	24
1	*****	0.08	0.11	0.15	0.15	0.17	0.22	0.31	0.28	0.29	0.23	0.24
2	0.06	0.06	0.05	0.06	0.07	0.08	0.08	0.06	0.04	0.05	0.05	0.04
3	0.06	0.06	0.06	0.07	0.09	0.11	0.08	0.03	0.05	0.04	0.04	0.06
4	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02
5	0.03	0.02	0.02	0.02	0.03	0.08	0.05	0.02	0.02	0.02	0.01	0.02
6	*****	*****	*****	*****	0.07	0.08	0.08	0.07	0.06	0.04	0.03	0.02
7	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
8	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02
9	0.03	0.02	0.02	0.03	0.03	0.04	0.12	0.14	0.21	0.07	0.07	0.04
10	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02
11	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
12	0.03	0.03	0.03	0.04	0.05	0.04	0.05	0.04	0.03	0.03	0.02	0.02
13	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.01
14	0.02	0.02	0.02	0.03	0.05	0.12	0.20	0.09	0.24	0.29	0.17	0.14
15	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
16	0.06	0.06	0.04	0.06	0.10	0.11	0.16	0.17	0.17	0.10	0.08	0.07
17	0.07	0.09	0.11	0.13	0.12	0.09	0.09	0.08	0.06	0.05	0.04	0.05
18	0.03	0.03	0.03	0.03	0.04	0.06	0.07	0.04	0.03	0.03	0.05	0.06
19	0.04	0.04	0.05	0.05	0.07	0.11	0.20	0.30	0.24	0.14	0.10	0.08
20	0.08	0.05	0.08	0.07	0.06	0.05	0.03	0.02	0.02	0.02	0.02	0.02
21	0.03	0.03	0.03	0.04	0.05	0.06	0.08	0.06	0.03	0.03	0.02	0.02
22	0.03	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.08
23	0.04	0.04	0.04	0.05	0.06	0.09	0.09	0.12	0.18	0.17	0.18	0.15
24	0.05	0.05	0.06	0.05	0.05	0.06	0.05	0.04	0.04	0.04	0.04	0.04
25	0.03	0.03	0.03	0.03	0.03	0.05	0.09	0.07	0.09	0.09	0.09	0.07
26	0.02	0.02	0.03	0.04	0.05	0.11	0.22	0.40	0.06	0.03	0.04	0.07
27	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03
28	*****	*****	*****	*****	0.04	0.09	0.28	0.36	0.55	0.40	0.14	0.17





OXIDES OF NITROGEN - NOX SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH FEB. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	9	10.7
NE	8	9.5
E	16	19.0
SE	6	7.1
S	3	3.6
SW	0	0.0
W	6	7.1
NW	15	17.9
CALM	21	25.0
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF WIND HOURS OF WIND OCCURRENCE	READINGS WITH WIND DIRECTION HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	92	9	9.8
NE	70	8	11.4
E	239	16	6.7
SE	49	6	12.2
S	14	3	21.4
SW	3	0	0.0
W	31	6	19.4
NW	95	15	15.8
CALM	64	21	32.8
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE  
THOSE GREATER THAN 0.10

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT  
ST. ALBERT SUMU



# OXIDES OF NITROGEN - NO2 SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.05	8	0.05	3	0.0	0	0.05	11	0.06
2	0.0	0	0.04	5	0.04	8	0.04	13	0.05
3	0.02	8	0.03	8	0.03	8	0.03	24	0.04
4	0.03	8	0.02	8	0.02	8	0.02	24	0.03
5	0.01	8	0.02	8	0.01	8	0.01	24	0.03
6	0.01	8	0.03	2	0.04	8	0.02	18	0.04
7	0.02	8	0.02	8	0.02	8	0.02	24	0.02
8	0.02	8	0.03	8	0.02	8	0.03	24	0.04
9	0.02	8	0.03	8	0.04	8	0.03	24	0.04
10	0.02	8	0.02	8	0.02	8	0.02	24	0.03
11	0.01	8	0.02	8	0.02	8	0.02	24	0.02
12	0.04	8	0.03	8	0.03	8	0.03	24	0.04
13	0.01	8	0.03	8	0.02	8	0.02	24	0.03
14	0.01	8	0.02	8	0.05	8	0.03	24	0.05
15	0.05	8	0.04	8	0.04	8	0.04	24	0.05
16	0.03	8	0.04	8	0.05	8	0.04	24	0.05
17	0.04	8	0.04	8	0.05	8	0.04	24	0.07
18	0.04	8	0.03	8	0.04	8	0.04	24	0.05
19	0.05	8	0.04	8	0.05	8	0.05	24	0.05
20	0.05	8	0.06	8	0.02	8	0.05	24	0.09
21	0.01	8	0.02	8	0.03	8	0.02	24	0.04
22	0.02	8	0.03	8	0.04	8	0.03	24	0.04
23	0.03	8	0.03	8	0.04	8	0.04	24	0.04
24	0.04	8	0.05	8	0.04	8	0.04	24	0.05
25	0.02	8	0.03	8	0.04	8	0.03	24	0.05
26	0.02	8	0.03	8	0.04	8	0.03	24	0.05
27	0.02	8	0.03	8	0.03	8	0.03	24	0.04
28	0.02	8	0.04	1	0.05	8	0.04	17	0.05

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.09 ON DAY 20 901 - 1000 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

E 3 / E 7 / E 9

PEAK CALENDAR DAY AVG. 0.05 ON DAY 1

ARITHMETIC MEAN 0.03 NO. RDGS. 635 HRS. (%OPER. 94.49%)

## COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR 0.21	0	0.0
24-HOUR 0.11	0	0.0

COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	0	0.0	0.0
0.001 - 0.110	635	100.0	100.0
0.111 - 0.210	0	0.0	100.0
0.211 - 0.420	0	0.0	100.0
0.421 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## OXIDES OF NITROGEN - NO2 SUMU

PPM ONE HOUR AVERAGE

MONTN FEB. 79

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OXIDES OF NITROGEN - NO<sub>2</sub> SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH FEB. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	0	0.0
NE	2	16.7
E	4	33.3
SE	0	0.0
S	0	0.0
SW	0	0.0
W	3	25.0
NW	0	0.0
CALM	3	25.0
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	92	0	0.0
NE	70	2	2.9
E	234	4	1.7
SE	44	0	0.0
S	11	0	0.0
SW	3	0	0.0
W	31	3	9.7
NW	95	0	0.0
CALM	55	3	5.5
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE  
THOSE GREATER THAN 0.06

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT  
ST. ALBERT SUMU



## OXIDES OF NITROGEN - NO SUMU

PPM ONE HOUR AVERAGE

MCNTH FEB. 79

DAY	0001-0800 AVE. NO.		0801-1600 AVE. NO.		1601-2400 AVE. NO.		FULL DAY AVE. NO.		DAILY PEAK
1	0.08	8	0.08	3	0.0	0	0.08	11	0.23
2	0.0	0	0.02	5	0.02	8	0.02	13	0.03
3	0.01	8	0.03	8	0.04	8	0.02	24	0.07
4	0.02	8	0.02	8	0.01	8	0.02	24	0.03
5	0.00	8	0.01	8	0.02	8	0.01	24	0.05
6	0.00	8	0.03	2	0.02	8	0.01	18	0.04
7	0.00	8	0.00	8	0.00	8	0.00	24	0.01
8	0.03	8	0.02	8	0.00	8	0.02	24	0.10
9	0.00	8	0.00	8	0.05	8	0.02	24	0.17
10	0.00	8	0.00	8	0.00	8	0.00	24	0.00
11	0.00	8	0.00	8	0.00	8	0.00	24	0.00
12	0.05	8	0.03	8	0.00	8	0.03	24	0.16
13	0.00	8	0.00	8	0.00	8	0.00	24	0.01
14	0.00	8	0.00	8	0.12	8	0.04	24	0.24
15	0.07	8	0.00	8	0.00	8	0.02	24	0.12
16	0.00	8	0.02	8	0.07	8	0.03	24	0.12
17	0.01	8	0.02	8	0.02	8	0.02	24	0.06
18	0.04	8	0.00	8	0.01	8	0.01	24	0.11
19	0.04	8	0.03	8	0.11	8	0.06	24	0.25
20	0.02	8	0.03	8	0.01	8	0.02	24	0.05
21	0.00	8	0.01	8	0.02	8	0.01	24	0.04
22	0.01	8	0.02	8	0.03	8	0.02	24	0.08
23	0.04	8	0.03	8	0.09	8	0.05	24	0.14
24	0.07	8	0.04	8	0.00	8	0.04	24	0.12
25	0.00	8	0.00	8	0.03	8	0.01	24	0.05
26	0.02	8	0.01	8	0.09	8	0.04	24	0.35
27	0.00	8	0.01	8	0.01	8	0.01	24	0.02
28	0.00	8	0.01	1	0.21	8	0.10	17	0.50

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.50 ON DAY 28 2001 - 2100 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

NW 18 / NW 18 / NW 12

PEAK CALENDAR DAY AVG. 0.10 ON DAY 28

ARITHMETIC MEAN 0.02 NO. RDGS. 635 HRS. (%OPER. 94.49%)

POLLUTANT NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS)  
REGULATIONS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	283	44.6	44.6
0.001 - 0.110	321	50.6	95.1
0.111 - 0.210	23	3.6	98.7
0.211 - 0.420	7	1.1	99.8
0.421 OR OVER	1	0.2	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## OXIDES OF NITROGEN - NO SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

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	1	2	3	4	5	6	7	8	9	10	11	12
1	0.06	0.03	0.04	0.04	0.06	0.06	0.10	0.23	0.12	0.06	0.05	*****
2	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	0.02
3	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02
4	0.03	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.02
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01
6	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	*****	*****
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.10	0.08	0.03	0.02
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.01	0.02	0.01	0.00	0.00	0.04	0.13	0.16	0.14	0.03	0.02	0.01
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
15	0.12	0.07	0.05	0.04	0.04	0.03	0.08	0.09	0.01	0.01	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.02	0.03	0.02	0.00	0.01
17	0.01	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
18	0.03	0.09	0.11	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.03	0.03	0.03	0.03	0.03	0.05	0.06	0.05	0.06	0.05	0.04	0.02
20	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.05	0.04	0.02	0.03	0.01
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
22	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.08	0.05	0.00	0.00
23	0.04	0.03	0.02	0.01	0.01	0.02	0.07	0.13	0.08	0.05	0.03	0.03
24	0.09	0.08	0.07	0.06	0.08	0.05	0.05	0.09	0.08	0.12	0.07	0.04
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.01	0.01	0.01	0.00	0.01	0.01	0.05	0.04	0.03	0.02	0.01	0.01
27	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	*****	*****	*****

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	13	14	15	16	17	18	19	20	21	22	23	24
1	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2	0.02	0.02	0.01	0.02	0.03	0.03	0.03	0.02	0.00	0.01	0.01	0.00
3	0.03	0.03	0.03	0.04	0.05	0.07	0.04	0.05	0.02	0.01	0.01	0.03
4	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
5	0.01	0.01	0.01	0.01	0.01	0.05	0.03	0.01	0.01	0.01	0.00	0.01
6	*****	*****	*****	*****	0.03	0.04	0.04	0.03	0.02	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.10	0.17	0.03	0.03	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.01	0.02	0.08	0.15	0.04	0.19	0.24	0.12	0.09
15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.02	0.02	0.00	0.02	0.05	0.06	0.11	0.12	0.12	0.05	0.03	0.02
17	0.02	0.04	0.05	0.06	0.05	0.03	0.04	0.03	0.01	0.00	0.00	0.01
18	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01
19	0.01	0.00	0.01	0.01	0.03	0.06	0.15	0.25	0.19	0.09	0.05	0.03
20	0.04	0.01	0.03	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00
21	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.03	0.01	0.01	0.00	0.00
22	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04
23	0.01	0.01	0.01	0.01	0.02	0.05	0.05	0.08	0.14	0.13	0.14	0.11
24	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.02	0.04	0.04	0.04	0.02
26	0.00	0.00	0.01	0.01	0.02	0.07	0.17	0.35	0.02	0.01	0.01	0.03
27	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
28	*****	*****	*****	*****	0.00	0.04	0.23	0.31	0.50	0.35	0.09	0.12





OXIDES OF NITROGEN - NO SUMU

FREQUENCY DISTRIBUTION TABLES

MONTH FEB. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	4	11.8
NE	6	17.6
E	5	14.7
SE	2	5.9
S	1	2.9
SW	0	0.0
W	3	8.8
NW	10	29.4
CALM	3	8.8
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF HOURS OF WIND OCCURRENCE	READINGS WITH WIND DIRECTION HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	92	4	4.3
NE	70	6	8.6
E	234	5	2.1
SE	44	2	4.5
S	11	1	9.1
SW	3	0	0.0
W	31	3	9.7
NW	95	10	10.5
CALM	55	3	5.5
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.10

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST. ALBERT SUMU



## SULFUR DIOXIDE SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
DAY	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.00	8	0.00	8	0.00	8	0.00	24	0.00
2	0.00	8	0.00	8	0.00	8	0.00	24	0.00
3	0.00	8	0.00	8	0.00	8	0.00	24	0.00
4	0.00	8	0.00	8	0.00	8	0.00	24	0.00
5	0.00	8	0.00	8	0.00	8	0.00	24	0.00
6	0.00	8	0.00	8	0.00	8	0.00	24	0.00
7	0.00	8	0.00	8	0.00	8	0.00	24	0.00
8	0.00	8	0.01	8	0.00	8	0.00	24	0.01
9	0.00	8	0.00	8	0.00	8	0.00	24	0.01
10	0.00	8	0.00	8	0.00	8	0.00	24	0.00
11	0.00	8	0.00	8	0.00	8	0.00	24	0.00
12	0.00	8	0.01	8	0.00	8	0.00	24	0.01
13	0.00	8	0.00	8	0.00	8	0.00	24	0.00
14	0.00	8	0.00	8	0.01	8	0.00	24	0.01
15	0.00	8	0.00	8	0.00	8	0.00	24	0.00
16	0.00	8	0.00	8	0.00	8	0.00	24	0.00
17	0.00	8	0.00	8	0.00	8	0.00	24	0.00
18	0.00	8	0.00	8	0.00	8	0.00	24	0.00
19	0.00	8	0.00	8	0.00	8	0.00	24	0.01
20	0.00	8	0.00	8	0.00	8	0.00	24	0.01
21	0.00	8	0.00	8	0.00	8	0.00	24	0.01
22	0.00	8	0.00	8	0.00	8	0.00	24	0.00
23	0.00	8	0.00	8	0.00	8	0.00	24	0.01
24	0.00	8	0.01	8	0.00	8	0.00	24	0.01
25	0.00	8	0.00	8	0.00	8	0.00	24	0.00
26	0.00	8	0.00	8	0.00	8	0.00	24	0.01
27	0.00	8	0.00	6	0.0	0	0.00	14	0.00
28	0.0	0	0.00	1	0.01	8	0.01	9	0.02

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.02 ON DAY 28 2001 - 2100 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

NW 18 / NW 18 / NW 12

PEAK CALENDAR DAY AVG. 0.01 ON DAY 28

ARITHMETIC MEAN 0.00 NO. RDGS. 647 HRS. (%OPER. 96.28%)

## COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR 0.17	0	0.0
24-HOUR 0.06	0	0.0

COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	592	91.5	91.5
0.001 - 0.060	55	8.5	100.0
0.061 - 0.170	0	0.0	100.0
0.171 - 0.340	0	0.0	100.0
0.341 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED









SULFUR DIOXIDE    SUMU  
 FREQUENCY DISTRIBUTION TABLES  
 MONTH    FEB.    79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	5	9.1
NE	6	10.9
E	10	18.2
SE	1	1.9
S	1	1.8
SW	0	0.0
W	5	9.1
NW	20	36.4
CALM	7	12.7
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	92	5	5.4
NE	66	6	9.1
E	230	10	4.3
SE	49	1	2.0
S	14	1	7.1
SW	3	0	0.0
W	31	5	16.1
NW	96	20	20.8
CALM	66	7	10.6
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE  
 THOSE GREATER THAN 0.00

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT  
 ST. ALBERT SUMU



OZONE SUMU  
PPHM ONE HOUR AVERAGE  
MONTH FEB. 79

DAY	0001-0800 AVE. NO.		0801-1600 AVE. NO.		1601-2400 AVE. NO.		FULL DAY AVE. NO.		DAILY PEAK
1	0.00	8	0.93	7	0.00	8	0.28	23	2.0
2	0.00	8	1.69	8	1.38	8	1.02	24	2.5
3	1.94	8	2.31	8	0.50	8	1.58	24	3.0
4	0.00	8	2.06	8	2.25	8	1.44	24	3.0
5	3.13	8	3.50	8	1.88	8	2.83	24	3.5
6	2.50	8	2.00	6	0.57	7	1.71	21	3.5
7	2.38	8	2.88	8	2.50	8	2.58	24	3.0
8	1.94	8	2.25	8	2.75	8	2.31	24	4.0
9	2.50	8	2.94	8	1.25	8	2.23	24	4.0
10	3.88	8	4.00	8	3.63	8	3.83	24	4.5
11	3.94	8	3.69	8	3.13	8	3.58	24	4.5
12	0.56	8	2.44	8	2.63	8	1.88	24	3.5
13	3.75	8	3.81	8	3.44	8	3.67	24	4.5
14	4.19	8	3.81	8	0.69	8	2.90	24	4.5
15	0.00	8	2.88	8	2.25	8	1.71	24	3.5
16	1.75	8	2.56	8	0.31	8	1.54	24	3.5
17	0.81	8	2.50	8	0.88	8	1.40	24	3.0
18	1.31	8	3.31	8	1.69	8	2.10	24	3.5
19	0.06	8	1.69	8	2.75	8	1.50	24	3.0
20	0.00	8	1.88	8	2.94	8	1.60	24	3.5
21	3.00	8	3.25	8	2.00	8	2.75	24	3.5
22	2.69	8	2.56	8	0.38	8	1.88	24	3.5
23	0.00	8	2.06	8	0.31	8	0.79	24	3.0
24	0.00	8	1.88	8	1.25	8	1.04	24	3.0
25	2.63	8	3.75	8	0.94	8	2.44	24	4.5
26	2.31	8	3.00	8	1.31	8	2.21	24	4.0
27	1.25	8	2.00	8	1.75	8	1.67	24	2.0
28	3.19	8	0.25	4	0.38	8	1.48	20	3.5

SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING                      4.5 ON DAY 10              301 - 400 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

N 9 / NW 5 / N 7

PEAK CALENDAR DAY AVG.                      3.83 ON DAY 10

ARITHMETIC MEAN              2.01              NO. RDGS. 664 HRS. (%OPER. 98.81%)

COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR      5.10	0	0.0
24-HOUR     1.50	20	72.3

COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	139	20.9	20.9
0.001 - 1.500	125	18.8	39.8
1.501 - 5.100	400	60.2	100.0
5.101 - 8.100	0	0.0	100.0
8.101 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



OZONE SUMU  
PPHM ONE HOUR AVERAGE  
MONTH FEB. 79

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	1	2	3	4	5	6	7	8	9	10	11	12
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	*****
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5	2.0
3	1.0	1.0	1.0	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.5	2.5
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.0	2.5
5	3.5	2.5	2.0	3.5	3.5	3.5	3.5	3.0	3.5	3.5	3.5	3.5
6	2.5	3.0	3.0	3.5	2.0	2.5	2.5	1.0	1.0	1.5	2.0	*****
7	2.0	2.5	2.5	2.5	2.0	2.5	2.5	2.5	2.5	3.0	3.0	3.0
8	3.0	3.5	4.0	3.0	2.0	0.0	0.0	0.0	0.0	1.5	2.5	2.5
9	2.5	3.0	2.5	3.0	2.5	3.0	2.0	1.5	2.0	2.5	2.5	2.5
10	2.5	3.0	4.0	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0	4.0
11	3.5	4.0	4.0	4.0	4.5	4.0	4.0	3.5	3.5	3.0	3.5	4.0
12	1.5	0.5	1.0	1.0	0.5	0.0	0.0	0.0	0.0	1.5	2.0	2.5
13	4.0	4.0	4.0	4.0	4.0	4.0	3.5	2.5	3.0	4.0	4.0	4.0
14	4.5	4.5	4.5	4.5	4.5	4.5	4.0	2.5	2.5	3.5	4.0	4.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	3.0
16	2.5	3.0	2.0	1.5	2.0	1.5	1.0	0.5	0.5	1.5	3.0	3.0
17	0.0	0.5	0.5	0.0	0.5	1.5	2.0	1.5	2.0	2.5	3.0	3.0
18	0.5	0.0	0.0	0.5	1.5	2.5	2.5	3.0	2.5	3.0	3.5	3.5
19	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.5
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.0	1.5
21	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
22	3.0	3.5	3.5	3.5	3.5	3.5	1.0	0.0	0.0	1.0	3.0	3.5
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5	2.5
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.5
25	1.5	1.5	3.0	3.0	3.0	3.5	3.0	2.5	3.0	3.0	3.5	3.5
26	1.0	2.5	2.0	2.5	3.5	3.0	3.0	1.0	1.5	1.5	3.0	3.0
27	2.0	1.5	1.0	1.0	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.0
28	3.5	3.5	3.5	3.5	3.5	3.5	3.0	1.5	1.0	0.0	0.0	0.0

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	13	14	15	16	17	18	19	20	21	22	23	24
1	1.5	2.0	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2.0	2.5	2.5	2.0	2.0	1.0	1.0	1.5	1.5	2.0	1.0	1.0
3	2.5	3.0	2.0	2.0	1.5	0.5	0.0	0.0	0.0	0.5	1.5	0.0
4	2.5	2.5	2.5	2.5	1.5	1.0	2.0	2.5	2.5	2.5	3.0	3.0
5	3.5	3.5	3.5	3.5	2.0	0.5	1.0	2.5	2.0	2.0	3.0	2.0
6	2.5	2.5	2.5	*****	*****	0.5	0.0	0.0	0.0	0.5	1.0	2.0
7	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
8	2.5	3.0	3.0	3.0	2.5	2.5	2.5	2.5	3.0	3.0	3.0	3.0
9	3.0	3.5	4.0	3.5	3.5	3.5	0.5	0.0	0.0	0.5	0.5	1.5
10	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.0	3.0	3.5	4.0	4.0
11	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	3.0	2.5	3.0	2.5
12	3.0	3.5	3.5	3.5	3.0	2.0	1.5	2.0	3.0	3.0	3.0	3.5
13	4.0	4.0	4.0	3.5	3.5	3.0	3.0	3.5	3.0	3.5	3.5	4.5
14	4.0	4.0	4.5	4.0	3.0	1.0	0.0	1.0	0.5	0.0	0.0	0.0
15	3.5	3.5	3.5	3.5	2.5	2.5	2.0	2.0	2.0	2.5	2.0	2.5
16	3.0	3.0	3.5	3.0	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
17	2.5	2.5	2.5	2.0	1.0	0.5	0.0	0.0	1.0	1.5	1.5	1.5
18	3.5	3.5	3.5	3.5	3.5	1.5	0.5	2.0	2.5	2.5	1.0	0.0
19	2.5	2.5	2.5	2.5	2.0	2.5	2.5	3.0	3.0	3.0	3.0	3.0
20	2.5	3.0	2.5	3.0	2.5	2.5	3.5	3.0	3.0	3.0	3.0	3.0
21	3.5	3.5	3.5	3.5	3.0	1.5	0.0	1.0	2.5	2.5	2.5	3.0
22	3.5	3.5	3.5	2.5	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
23	3.0	3.0	3.0	2.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
24	3.0	3.0	2.5	2.0	1.5	2.0	1.0	0.5	1.0	1.5	1.0	1.5
25	4.0	4.0	4.5	4.5	4.0	2.5	0.0	0.5	0.5	0.0	0.0	0.0
26	3.5	4.0	4.0	3.5	3.0	1.5	0.0	0.0	2.0	2.0	1.5	0.5
27	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	1.5	1.5
28	*****	*****	*****	*****	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0





OZONE SUMU  
FREQUENCY DISTRIBUTION TABLES  
MONTH FEB. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	74	14.1
NE	50	9.5
E	215	41.0
SE	35	6.7
S	8	1.5
SW	2	0.4
W	23	4.4
NW	76	14.5
CALM	42	8.0
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH HOURS OF WIND OCCURRENCE	FREQUENCY OF READINGS HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	92	74	80.4
NE	73	50	68.5
E	242	215	88.8
SE	49	35	71.4
S	14	8	57.1
SW	3	2	66.7
W	31	23	74.2
NW	95	76	80.0
CALM	65	42	64.6
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE  
THOSE GREATER THAN 0.0

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA
3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT  
ST. ALBERT SUMU



## TOTAL HYDROCARBON SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY	DAILY	
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.	PEAK	
1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10	0.0	0	0.0	0	0.0	0	0.0	0	0.0
11	0.0	0	0.0	0	0.0	0	0.0	0	0.0
12	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18	0.0	0	0.0	0	0.0	0	0.0	0	0.0
19	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20	0.0	0	1.50	2	1.50	8	1.50	10	1.5
21	1.50	8	1.50	8	1.50	8	1.50	24	1.5
22	1.50	8	1.50	8	1.50	8	1.50	24	1.5
23	1.88	8	1.56	8	1.81	8	1.75	24	2.0
24	2.00	8	1.69	8	1.50	8	1.73	24	2.0
25	1.50	8	1.50	8	1.50	8	1.50	24	1.5
26	1.50	8	1.50	8	1.63	8	1.54	24	2.0
27	1.50	8	1.50	8	1.50	8	1.50	24	1.5
28	1.50	8	1.50	8	1.88	8	1.63	24	3.0

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 3.0 ON DAY 28 2101 - 2200 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

NW 18 / NW 12 / NW 11

PEAK CALENDAR DAY AVG. 1.75 ON DAY 23

ARITHMETIC MEAN 1.58 NO. RDGS. 202 HRS. (%OPER. 30.06%)

POLLUTANT NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS) REGULATIONS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	0	0.0	0.0
0.001 - 1.500	174	86.1	86.1
1.501 - 3.999	28	13.9	100.0
4.000 - 7.999	0	0.0	100.0
8.000 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



DAY

[illegible]





TOTAL HYDROCARBON SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH FEB. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	0	0.0
NE	0	0.0
E	0	0.0
SE	0	0.0
S	0	0.0
SW	0	0.0
W	0	0.0
NW	2	100.0
CALM	0	0.0
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS HOURS OF WIND OCCURRENCE	WITH WIND DIRECTION HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	38	0	0.0
NE	25	0	0.0
E	63	0	0.0
SE	12	0	0.0
S	2	0	0.0
SW	0	0	0.0
W	19	0	0.0
NW	28	2	7.1
CALM	15	0	0.0
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 2.0

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST. ALBERT SUMU



## CARBON MONOXIDE SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.69	8	1.33	3	1.50	8	1.13	19	2.0
2	0.25	8	0.25	8	0.31	8	0.27	24	1.0
3	0.00	8	0.25	8	0.81	8	0.35	24	1.0
4	0.56	8	0.50	8	0.25	8	0.44	24	1.0
5	0.00	8	0.44	8	0.31	8	0.25	24	0.5
6	0.06	8	0.57	7	0.63	8	0.41	23	1.0
7	0.06	8	0.50	8	0.50	8	0.35	24	0.5
8	0.75	8	1.19	3	0.69	8	0.88	24	2.0
9	0.13	8	0.50	8	1.31	8	0.65	24	2.0
10	0.31	8	0.50	8	0.50	8	0.44	24	0.5
11	0.00	8	0.44	8	0.50	8	0.31	24	0.5
12	0.88	8	1.38	8	0.75	8	1.00	24	2.5
13	0.13	8	0.56	8	0.75	8	0.48	24	1.0
14	0.19	8	0.69	3	2.81	8	1.23	24	4.5
15	1.69	8	1.06	8	0.75	8	1.17	24	3.0
16	0.56	8	1.19	3	1.75	8	1.17	24	2.5
17	0.81	8	1.00	8	0.88	8	0.90	24	1.5
18	0.75	8	0.50	8	1.06	8	0.77	24	2.0
19	1.06	8	0.94	8	1.38	8	1.13	24	2.5
20	0.56	8	0.81	8	0.63	8	0.67	24	1.0
21	0.56	8	0.44	8	0.25	8	0.42	24	1.0
22	0.13	8	0.19	8	0.44	8	0.25	24	1.0
23	0.31	8	0.56	8	0.94	8	0.60	24	1.5
24	0.69	8	0.94	8	0.50	8	0.71	24	2.0
25	0.13	8	0.31	8	0.50	8	0.31	24	0.5
26	0.13	8	0.63	8	1.00	8	0.58	24	2.5
27	0.56	8	0.50	8	0.31	8	0.46	24	1.0
28	0.06	8	0.10	5	2.13	8	0.86	21	4.0

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 4.5 ON DAY 14 2001 - 2100 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

NW 24 / NW 13 / NW 18

PEAK 8-HR. AVG. 2.81 ON DAY 14

ARITHMETIC MEAN 0.64 NO. RDGS. 663 HRS. (%PER. 98.66%)

## COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR 13.00	0	0.0
8-HOUR 5.00	0	0.0

COMPARISON TO 8-HOUR REGULATION WAS ON THE TIME PERIODS AS INDICATED  
IN THE ABOVE COLUMNS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	142	21.4	21.4
0.001 - 1.500	486	73.3	94.7
1.501 - 5.000	35	5.3	100.0
5.001 - 13.000	0	0.0	100.0
13.001 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## CARBON MONOXIDE SUMU

PPM ONE HOUR AVERAGE

MONTH FEB. 79

14  
D  
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Y

	1	2	3	4	5	6	7	8	9	10	11	12
1	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	1.0	1.0	*****
2	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	0.5	0.5	*****
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
8	0.5	0.5	0.5	0.5	0.5	0.5	1.0	2.0	2.0	1.5	1.0	1.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
10	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
12	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.5	2.5	2.0	1.5	1.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.0	0.5	0.5	0.5
14	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.0	1.0	0.5	0.5
15	3.0	2.0	1.5	1.5	1.0	1.0	1.5	2.0	1.5	1.0	1.0	1.0
16	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	1.0	1.0	1.5
17	1.0	0.5	1.0	1.5	0.5	0.5	0.5	1.0	0.5	0.5	1.0	0.5
18	0.5	2.0	1.5	1.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5
19	1.5	1.0	1.0	0.5	1.0	1.0	1.0	1.5	2.0	1.5	1.0	1.0
20	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
21	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	1.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.5	0.0	0.0
23	0.5	0.0	0.0	0.0	0.0	0.0	0.5	1.5	1.0	0.5	0.5	0.5
24	1.0	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	1.0	1.0
25	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
26	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.0	0.5	0.5
27	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0

D  
A  
Y

	13	14	15	16	17	18	19	20	21	22	23	24
1	*****	*****	*****	*****	1.0	1.5	1.5	2.0	1.5	2.0	1.5	1.0
2	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
3	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5
4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
6	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5
7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.0
9	0.5	0.5	0.5	0.5	1.0	1.0	1.5	2.0	2.0	1.0	1.0	1.0
10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
11	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
12	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
13	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
14	0.5	0.5	0.5	1.0	1.0	2.0	2.5	2.0	4.5	4.0	3.5	3.0
15	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	0.5	0.5	0.5
16	1.5	1.0	1.0	1.0	2.5	2.5	1.5	2.0	2.0	1.5	1.0	1.0
17	1.5	1.0	1.5	1.5	1.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5
18	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.0	1.5	1.0
19	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.5	2.0	1.5	1.0	1.0
20	1.0	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
21	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
23	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	1.5	1.5
24	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
26	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.5	1.0	0.5	0.5	1.0
27	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
28	0.0	*****	*****	*****	0.5	1.0	2.0	2.5	4.0	3.5	1.5	2.0





CARBON MONOXIDE SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH FEB. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	0	0.0
NE	0	0.0
E	0	0.0
SE	0	0.0
S	0	0.0
SW	0	0.0
W	0	0.0
NW	5	100.0
CALM	0	0.0
INOP	0	0.0

FREQUENCY OF READINGS WITH WIND DIRECTION

WIND DIRECTION	HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	93	0	0.0
NE	73	0	0.0
E	244	0	0.0
SE	47	0	0.0
S	13	0	0.0
SW	3	0	0.0
W	31	0	0.0
NW	95	5	5.3
CALM	64	0	0.0
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 3.0

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA
3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST. ALBERT SUMU



## COMBINED AIR QUALITY INDEX

ST ALBER SUMU FEB. 1979

0-25 CLEAN AIR  
 26-50 LIGHT AIR POLLUTION  
 51-75 MODERATE AIR POLLUTION  
 76-100 HEAVY AIR POLLUTION  
 101 OR OVER SEVERE AIR POLLUTION

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DAY AVE
1	8	8	6	6	6	7	6	8	8	7	6	1	2	4	2	1	1	4	3	7	6	7	6	5	5
2	3	1	1	1	1	1	1	1	1	1	3	7	6	7	7	6	6	6	7	7	6	7	5	5	4
3	4	4	4	5	5	5	5	5	4	5	6	6	6	7	5	5	7	5	5	4	4	3	5	3	4
4	4	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	4	4	5	5	5	5	6	6	4
5	7	6	4	6	7	7	6	5	7	7	7	7	7	6	6	6	4	3	3	4	3	3	5	3	5
6	4	5	5	6	3	4	4	3	5	5	2	1	3	3	3	1	4	5	5	4	4	4	4	4	2
7	3	5	5	5	4	5	6	7	7	7	7	7	7	7	7	6	6	6	6	6	5	6	6	5	5
8	6	6	7	5	4	3	5	6	6	8	7	7	8	8	8	9	8	8	8	7	6	6	6	6	6
9	5	6	5	6	5	6	5	5	5	6	6	6	7	7	8	8	9	9	6	6	6	5	5	7	6
10	7	7	8	9	9	8	8	9	8	9	8	8	8	8	8	8	8	8	7	7	7	7	8	8	7
11	7	8	8	7	8	7	7	6	6	6	7	8	8	8	8	7	7	7	7	7	6	5	6	5	8
12	5	4	5	5	4	4	6	8	8	13	9	9	8	9	10	9	10	7	7	7	7	7	6	7	7
13	8	7	7	7	7	7	7	6	8	9	9	9	9	9	8	7	9	8	8	9	7	7	7	10	7
14	8	8	9	9	8	8	7	7	8	9	9	8	8	8	9	9	8	8	8	8	12	11	10	10	8
15	9	7	8	8	7	7	8	7	8	7	9	10	10	10	11	11	8	8	6	7	8	6	5	6	7
16	6	6	5	5	5	5	5	6	7	8	11	11	10	9	10	9	10	9	7	8	7	8	6	7	7
17	5	4	5	6	4	5	5	6	5	6	8	7	10	10	11	11	10	7	6	6	7	7	6	6	6
18	5	7	7	7	6	6	6	6	5	7	7	9	8	8	8	8	8	8	7	8	8	7	7	6	7
19	7	6	6	5	6	6	6	7	9	9	8	7	7	7	8	8	7	9	10	17	13	12	10	10	8
20	5	5	6	5	6	6	5	7	8	12	13	14	8	8	8	8	8	8	7	7	7	7	7	7	7
21	6	7	6	6	6	5	5	7	6	6	7	7	7	7	7	8	7	6	4	4	5	5	5	6	7
22	5	6	6	6	6	6	4	5	5	5	7	8	9	9	10	8	7	5	4	4	5	5	4	4	7
23	3	3	3	3	3	3	5	6	5	5	6	6	7	7	7	7	7	4	4	5	6	7	7	7	7
24	6	6	5	5	5	6	6	9	8	8	8	9	9	9	9	8	7	7	6	4	5	6	5	6	6
25	5	5	7	6	6	7	6	5	6	6	8	8	9	9	10	10	9	6	4	5	5	5	5	5	7
26	4	5	3	4	6	5	8	6	12	7	7	6	8	9	8	8	8	7	7	9	7	4	5	5	6
27	6	4	2	2	2	2	3	6	6	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	7
28	7	7	7	7	7	7	6	5	5	1	1	1	1	1	1	1	6	7	7	8	10	10	7	7	7
HR. AVE.	5	5	5	5	5	5	5	5	5	6	6	7	7	7	7	7	7	6	6	6	6	6	6	6	6

MONTHLY AVERAGE = 6  
 MONTHLY PEAK = 17 DAY 19 2000 HOURS



ALBERTA ENVIRONMENT  
DIVISION OF POLLUTION CONTROL  
AIR QUALITY CONTROL BRANCH

WIND FREQUENCY TABLE

STATION: ST ALBERT SUMU

MONTH: MAR. 1979

INSTRUMENT TYPE: NAMAQ WIND

DIRECTION	DEGREES	TOTAL HOURS	PERCENT	AVERAGE SPEED IN KM/H
N	338 TO 22	55	7.39	16.4
NE	23 TO 67	49	6.59	10.6
E	68 TO 112	67	9.01	11.0
SE	113 TO 157	89	11.96	9.4
S	158 TO 202	130	17.47	12.5
SW	203 TO 247	96	12.90	15.2
W	248 TO 292	89	11.96	14.7
NW	293 TO 337	123	16.53	19.0
CALM	0 TO 000	46	6.18	

AVERAGE WIND SPEED 13.9 KM/H

WIND INSTRUMENT OPERATIONAL 744 HOURS (100.00%)

AMBIENT AIR MONITORING REPORT FOR THE MONTH OF MAR. 1979

STATION: ST. ALBE SUMU

POLLUTANT	MONITOR	RANGE MAX.	PEAK HOURLY	PEAK DAILY	MONTH MEAN	% OPER
SOILING INDEX		COH	0.7	0.19	0.06	95.4
NOX		PPM	0.69	0.22	0.09	99.2
NO2		PPM	0.10	0.06	0.04	99.2
NO		PPM	0.63	0.18	0.05	99.2
SO2		PPM	0.03	0.01	0.00	99.3
O3		PPHM	6.0	3.33	2.03	99.6
THC		PPM	6.0	2.69	1.69	99.7
CO		PPM	6.0	3.81 <sup>a</sup>	0.71	100.0

<sup>a</sup> NOTE CARBON MONOXIDE CONTAINS PEAK 8-HR AVERAGE INSTEAD OF PEAK DAILY AVERAGE





# COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

POLLUTANT	REGULATIONS		NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
NO2	1-HOUR	0.21	0	0.0
	24-HOUR	0.11	0	0.0
SO2	1-HOUR	0.17	0	0.0
	24-HOUR	0.06	0	0.0
O3	1-HOUR	5.10	1	0.1
	24-HOUR	1.50	20	64.8
CO	1-HOUR	13.00	0	0.0
	8-HOUR	5.00	0	0.0

NOTE. COMPARISON TO 8-HOUR REGULATION WAS WITH TIME PERIODS 0001 - 0800  
0801 - 1600 AND 1601 - 2400

NOTE. COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

NOTE. OTHER POLLUTANTS NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS)  
REGULATIONS



# SUSPENDED PARTICULATE MATTER SOILING INDEX

## COEFFICIENT OF HAZE

SOILING INDEX STATION 1 SUMU MCNTH MAR. 79

DAY	0001-0800 AVE. NO.	0801-1600 AVE. NO.	1601-2400 AVE. NO.	FULL DAY AVE. NO.	DAILY PEAK
1	0.0	0	0.0	0	0.0
2	0.0	0	0.12	6	0.15
3	0.09	8	0.09	8	0.10
4	0.08	8	0.03	8	0.03
5	0.03	8	0.00	8	0.11
6	0.15	8	0.09	8	0.09
7	0.06	8	0.00	8	0.02
8	0.04	8	0.00	8	0.01
9	0.00	8	0.18	8	0.08
10	0.05	8	0.00	8	0.05
11	0.25	8	0.00	8	0.11
12	0.00	8	0.00	8	0.00
13	0.00	8	0.18	8	0.08
14	0.01	8	0.05	8	0.05
15	0.04	8	0.06	8	0.05
16	0.00	8	0.00	8	0.03
17	0.35	8	0.05	8	0.19
18	0.04	8	0.03	8	0.06
19	0.04	8	0.04	8	0.05
20	0.04	8	0.08	8	0.05
21	0.05	8	0.14	8	0.10
22	0.01	8	0.09	8	0.05
23	0.00	8	0.05	8	0.03
24	0.00	8	0.00	8	0.00
25	0.06	8	0.03	8	0.05
26	0.00	8	0.09	8	0.03
27	0.00	8	0.00	8	0.00
28	0.00	8	0.00	8	0.06
29	0.15	8	0.00	8	0.05
30	0.01	8	0.01	8	0.03
31	0.00	8	0.00	8	0.00

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.7 ON DAY 17 001 - 100 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

NW 7 / NW 7 / NW 1

PEAK CALENDAR DAY AVG. 0.19 ON DAY 17

ARITHMETIC MEAN 0.06 NO. RDGS. 710 HRS. (%OPER. 95.43%)

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	483	68.0	68.0
0.001 - 0.449	220	31.0	99.0
0.450 - 0.999	7	1.0	100.0
1.000 - 1.999	0	0.0	100.0
2.000 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## COEFFICIENT OF HAZE

DAY

Y	1	2	3	4	5	6	7	8	9	10	11	12
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1	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3	0.1	C.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1
4	0.1	C.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
6	0.4	C.2	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.1	0.2	0.0	0.0
7	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	C.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.2	0.4	0.4	0.2	0.0
10	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0	0.0	0.0	0.0	0.0
11	0.4	0.3	0.4	0.3	0.2	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
12	C.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0	0.2	0.4	0.4	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0
15	0.1	C.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	C.2	0.1	0.1	0.1
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	C.0	0.0	0.0	0.0
17	0.7	0.4	0.5	0.4	0.1	0.1	0.2	0.4	0.1	0.2	0.1	0.0	0.0	0.0
18	0.2	0.1	0.0	0.0	0.0	C.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	C.0	C.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.2	0.1	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.1	0.1	0.1	0.1	0.1
22	0.1	0.0	0.0	0.0	0.0	0.0	C.0	C.0	0.0	0.0	0.1	0.1	0.1	0.1
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	C.1	0.1	0.1	0.1
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	C.0	C.0	C.0	C.0	C.0	C.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.1	0.2	0.2	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	C.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0	C.0	0.0	0.0	0.0

A Y	13	14	15	16	17	18	19	20	21	22	23	24
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SUSPENDED PARTICULATE MATTER SOILING INDEX  
COEFFICIENT OF HAZE

FREQUENCY DISTRIBUTION TABLES

SOILING INDEX STATION 1 SUMU MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	0	0.0
NE	0	0.0
E	0	0.0
SE	2	28.6
S	0	0.0
SW	0	0.0
W	2	28.6
NW	2	28.6
CALM	1	14.3
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	52	0	0.0
NE	41	0	0.0
E	66	0	0.0
SE	87	2	2.3
S	123	0	0.0
SW	94	0	0.0
W	88	2	2.3
NW	122	2	1.6
CALM	37	1	2.7
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.5

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU



# SUSPENDED PARTICULATE MATTER SOILING INDEX

## COEFFICIENT OF HAZE

SOILING INDEX STATION 2 Mr. Smith's MONTH MAR. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE.	NO.	AVE.	NO.	AVE.	NO.	AVE.	NO.	PEAK
1	0.15	4	0.25	4	0.18	4	0.19	12	0.3
2	0.05	4	0.13	4	0.10	4	0.09	12	0.2
3	0.23	4	0.05	4	0.10	4	0.13	12	0.4
4	0.10	4	0.00	4	0.15	4	0.08	12	0.3
5	0.05	4	0.13	4	0.13	4	0.10	12	0.4
6	0.20	4	0.05	4	0.10	4	0.12	12	0.5
7	0.05	4	0.03	4	0.13	4	0.07	12	0.3
8	0.08	4	0.18	4	0.00	4	0.08	12	0.2
9	0.13	4	0.08	4	0.15	4	0.12	12	0.2
10	0.08	4	0.08	4	0.05	4	0.07	12	0.3
11	0.15	4	0.05	4	0.08	4	0.09	12	0.2
12	0.00	4	0.08	4	0.03	4	0.03	12	0.3
13	0.05	4	0.03	4	0.00	4	0.03	12	0.1
14	0.03	4	0.00	4	0.10	4	0.04	12	0.2
15	0.13	4	0.08	4	0.05	4	0.08	12	0.3
16	0.05	4	0.00	4	0.08	4	0.04	12	0.1
17	0.10	4	0.03	4	0.28	4	0.13	12	0.7
18	0.15	4	0.10	4	0.05	4	0.10	12	0.4
19	0.10	4	0.10	4	0.15	4	0.12	12	0.3
20	0.05	4	0.05	4	0.13	4	0.08	12	0.3
21	0.05	2	0.0	0	0.0	0	0.05	2	0.1
22	0.0	0	0.10	2	0.10	4	0.10	6	0.2
23	0.10	4	0.05	4	0.05	4	0.07	12	0.2
24	0.00	4	0.08	4	0.05	4	0.04	12	0.2
25	0.15	4	0.03	4	0.03	4	0.07	12	0.3
26	0.13	4	0.00	4	0.05	4	0.06	12	0.3
27	0.05	4	0.00	4	0.00	4	0.02	12	0.1
28	0.00	4	0.00	4	0.08	4	0.03	12	0.2
29	0.05	4	0.10	4	0.00	4	0.05	12	0.2
30	0.00	4	0.10	4	0.05	4	0.05	12	0.2
31	0.00	4	0.00	4	0.03	4	0.01	12	0.1

### SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.7 ON DAY 17 2001 - 2200 HOURS  
 PEAK CALENDAR DAY AVG. 0.19 ON DAY 1  
 ARITHMETIC MEAN 0.08 NO. RDGS. 356 HRS. (%OFR. 95.70%)

### FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	194	54.5	54.5
0.001 - 0.449	160	44.9	99.4
0.450 - 0.999	2	0.6	100.0
1.000 - 1.999	0	0.0	100.0
2.000 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## SUSPENDED PARTICULATE MATTER SOILING INDEX

## COEFFICIENT OF HAZE

SOILING INDEX STATION 2 Mr. Smith's MONTH MAR. 79

DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3
2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2
3	0.2	0.2	0.2	0.2	0.1	0.1	0.4	0.4	0.1	0.1	0.0	0.0
4	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0
5	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.4
6	0.5	0.5	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
8	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
9	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1
10	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
11	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
13	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0
14	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.3	0.3	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.1
16	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
17	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
18	0.4	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
19	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.0	0.3	0.3	0.0	0.0
20	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.2	0.0	0.0
21	0.1	0.1	0.0	0.0	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
23	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
25	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0
26	0.1	0.1	0.1	0.1	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY	13	14	15	16	17	18	19	20	21	22	23	24
1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.0	0.0
2	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.0	0.1	0.1
3	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.1
4	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.2	0.2	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.1	0.1
6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.0
7	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.1	0.1	0.1	0.1
8	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
10	0.3	0.3	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
11	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
12	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1
15	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
17	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.3	0.7	0.7	0.1	0.1
18	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0
19	0.0	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.2	0.2
21	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
22	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1
23	0.0	0.0	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
24	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
25	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
29	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0





## OXIDES OF NITROGEN - NOX SUMU

PPM ONE HOUR AVERAGE

Menth MAR. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.08	8	0.10	8	0.07	8	0.09	24	0.14
2	0.03	8	0.10	8	0.10	8	0.08	24	0.14
3	0.07	8	0.13	8	0.27	8	0.16	24	0.31
4	0.12	8	0.10	8	0.06	8	0.09	24	0.26
5	0.09	8	0.07	8	0.51	8	0.22	24	0.69
6	0.15	8	0.16	8	0.13	8	0.15	24	0.46
7	0.10	8	0.06	8	0.04	8	0.07	24	0.13
8	0.04	8	0.04	8	0.04	8	0.04	24	0.05
9	0.03	8	0.11	8	0.20	8	0.11	24	0.27
10	0.10	8	0.08	8	0.16	8	0.11	24	0.28
11	0.17	8	0.09	8	0.14	8	0.13	24	0.23
12	0.06	8	0.04	8	0.04	8	0.05	24	0.08
13	0.07	8	0.04	8	0.04	8	0.05	24	0.17
14	0.03	8	0.05	8	0.12	8	0.07	24	0.22
15	0.14	8	0.14	8	0.12	8	0.13	24	0.25
16	0.03	8	0.04	8	0.26	8	0.11	24	0.53
17	0.31	8	0.07	8	0.30	8	0.22	24	0.55
18	0.20	8	0.09	8	0.15	8	0.15	24	0.37
19	0.16	8	0.15	8	0.19	8	0.17	24	0.33
20	0.12	8	0.07	8	0.08	8	0.09	24	0.24
21	0.14	8	0.10	2	0.04	8	0.09	18	0.55
22	0.06	8	0.04	8	0.08	8	0.06	24	0.20
23	0.04	8	0.04	8	0.07	8	0.05	24	0.10
24	0.05	8	0.02	8	0.01	8	0.03	24	0.07
25	0.01	8	0.01	8	0.05	8	0.02	24	0.11
26	0.07	8	0.02	8	0.03	8	0.04	24	0.10
27	0.02	8	0.03	8	0.04	8	0.03	24	0.05
28	0.03	8	0.03	8	0.16	8	0.08	24	0.33
29	0.03	8	0.02	8	0.03	8	0.03	24	0.08
30	0.02	8	0.03	8	0.05	8	0.03	24	0.06
31	0.04	8	0.04	8	0.05	8	0.05	24	0.09

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.69 ON DAY 5 1701 - 1800 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

W 20 / W 20 / W 22

PEAK CALENDAR DAY AVG. 0.22 ON DAY 5

ARITHMETIC MEAN 0.09 NO. RDGS. 738 HRS. (%OPER. 99.19%)

POLLUTANT NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS) REGULATIONS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	0	0.0	0.0
0.001 - 0.110	561	76.0	76.0
0.111 - 0.210	115	15.6	91.6
0.211 - 0.420	52	7.0	98.6
0.421 OR OVER	10	1.4	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## OXIDES OF NITROGEN - NOX SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

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	1	2	3	4	5	6	7	8	9	10	11	12
1	0.10	0.08	0.06	0.06	0.09	0.08	0.09	0.11	0.14	0.14	0.11	0.10
2	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.08	0.12	0.10	0.11	0.11
3	0.07	0.08	0.08	0.07	0.06	0.05	0.06	0.09	0.10	0.10	0.12	0.14
4	0.26	0.20	0.14	0.08	0.07	0.07	0.06	0.07	0.10	0.13	0.14	0.10
5	0.06	0.06	0.07	0.06	0.04	0.05	0.09	0.26	0.13	0.04	0.04	0.05
6	0.26	0.08	0.06	0.07	0.08	0.09	0.14	0.46	0.34	0.15	0.14	0.11
7	0.11	0.10	0.09	0.09	0.09	0.08	0.08	0.13	0.09	0.09	0.09	0.08
8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05
9	0.02	0.02	0.02	0.02	0.02	0.03	0.06	0.08	0.09	0.11	0.11	0.13
10	0.21	0.18	0.12	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.08	0.08
11	0.23	0.23	0.19	0.16	0.13	0.10	0.12	0.20	0.11	0.07	0.05	0.06
12	0.08	0.06	0.07	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.05	0.04
13	0.05	0.05	0.04	0.03	0.04	0.04	0.11	0.17	0.07	0.06	0.03	0.03
14	0.03	0.02	0.02	0.02	0.03	0.03	0.04	0.07	0.07	0.06	0.05	0.05
15	0.13	0.14	0.12	0.10	0.10	0.12	0.15	0.25	0.23	0.19	0.17	0.13
16	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.04	0.03	0.04
17	0.41	0.37	0.29	0.25	0.25	0.26	0.26	0.36	0.20	0.11	0.06	0.04
18	0.32	0.37	0.22	0.13	0.12	0.15	0.14	0.12	0.12	0.12	0.12	0.08
19	0.17	0.14	0.14	0.14	0.14	0.14	0.16	0.22	0.21	0.17	0.17	0.14
20	0.10	0.09	0.08	0.09	0.10	0.13	0.11	0.24	0.15	0.09	0.06	0.05
21	0.05	0.04	0.04	0.05	0.07	0.11	0.20	0.55	0.14	0.06	*****	*****
22	0.03	0.03	0.03	0.03	0.03	0.04	0.08	0.20	0.05	0.04	0.04	0.03
23	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.05	0.04	0.04	0.04	0.05
24	0.06	0.06	0.06	0.07	0.06	0.04	0.04	0.05	0.04	0.04	0.03	0.03
25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
26	0.09	0.09	0.06	0.05	0.04	0.07	0.08	0.08	0.03	0.03	0.02	0.02
27	0.03	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.03	0.03
28	0.04	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.03
29	0.08	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
30	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.03	0.03	0.03	0.03
31	0.06	0.05	0.03	0.03	0.03	0.03	0.04	0.09	0.06	0.05	0.04	0.04

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	13	14	15	16	17	18	19	20	21	22	23	24
1	0.11	0.10	0.08	0.06	0.07	0.08	0.13	0.11	0.08	0.06	0.04	0.03
2	0.09	0.09	0.08	0.08	0.10	0.11	0.13	0.14	0.10	0.09	0.08	0.08
3	0.12	0.14	0.16	0.18	0.18	0.31	0.30	0.30	0.28	0.28	0.24	0.28
4	0.09	0.09	0.08	0.07	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
5	0.05	0.05	0.06	0.17	0.30	0.69	0.69	0.69	0.59	0.39	0.47	0.28
6	0.11	0.12	0.13	0.15	0.16	0.15	0.12	0.12	0.13	0.13	0.11	0.11
7	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.03
8	0.05	0.04	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.04	0.03	0.03
9	0.12	0.10	0.10	0.09	0.14	0.17	0.17	0.15	0.18	0.27	0.27	0.23
10	0.09	0.10	0.09	0.06	0.06	0.06	0.08	0.08	0.21	0.27	0.28	0.23
11	0.07	0.09	0.12	0.12	0.12	0.11	0.22	0.20	0.14	0.11	0.13	0.11
12	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.04
13	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.05	0.04	0.03	0.03	0.03
14	0.05	0.05	0.05	0.06	0.07	0.08	0.17	0.22	0.12	0.09	0.09	0.10
15	0.10	0.11	0.09	0.09	0.11	0.12	0.15	0.23	0.19	0.08	0.05	0.05
16	0.04	0.04	0.04	0.05	0.05	0.07	0.16	0.36	0.53	0.20	0.35	0.36
17	0.04	0.03	0.03	0.03	0.04	0.05	0.20	0.33	0.48	0.55	0.39	0.33
18	0.07	0.08	0.08	0.09	0.10	0.11	0.16	0.17	0.18	0.17	0.16	0.19
19	0.13	0.13	0.13	0.13	0.12	0.12	0.17	0.17	0.25	0.33	0.24	0.14
20	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.13	0.11	0.11	0.09	0.05
21	*****	*****	*****	*****	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04
22	0.05	0.03	0.04	0.03	0.06	0.10	0.11	0.12	0.08	0.06	0.06	0.07
23	0.03	0.03	0.03	0.08	0.10	0.09	0.07	0.06	0.06	0.05	0.06	0.06
24	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
25	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.05	0.08	0.07	0.08	0.11
26	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.10	0.04	0.02	0.02	0.03
27	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.04	0.03	0.03
28	0.04	0.04	0.05	0.04	0.03	0.03	0.04	0.15	0.33	0.27	0.26	0.21
29	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.05	0.04	0.04	0.03	0.02
30	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.05	0.04	0.06
31	0.03	0.04	0.04	0.04	0.05	0.06	0.07	0.06	0.05	0.04	0.05	0.05



OXIDES OF NITROGEN - NOX SUMU

FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	8	3.9
NE	5	2.4
E	16	7.8
SE	41	19.9
S	50	24.3
SW	35	17.0
W	23	11.2
NW	14	6.8
CALM	14	6.8
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	8	14.5
NE	49	5	10.2
E	67	16	23.9
SE	88	41	46.6
S	129	50	38.8
SW	95	35	36.8
W	88	23	26.1
NW	123	14	11.4
CALM	44	14	31.8
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.10

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU





# OXIDES OF NITROGEN - NO2 SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

8

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.05	8	0.06	8	0.04	8	0.05	24	0.08
2	0.01	8	0.05	8	0.06	8	0.04	24	0.06
3	0.04	8	0.06	8	0.08	8	0.06	24	0.09
4	0.05	8	0.06	8	0.04	8	0.05	24	0.06
5	0.04	8	0.03	8	0.06	8	0.04	24	0.06
6	0.05	8	0.07	8	0.07	8	0.06	24	0.08
7	0.04	8	0.03	8	0.03	8	0.03	24	0.04
8	0.01	8	0.02	8	0.03	8	0.02	24	0.03
9	0.03	8	0.05	8	0.06	8	0.05	24	0.07
10	0.05	8	0.05	8	0.05	8	0.05	24	0.06
11	0.06	8	0.01	8	0.02	8	0.03	24	0.10
12	0.05	8	0.03	8	0.04	8	0.04	24	0.07
13	0.04	8	0.03	8	0.04	8	0.04	24	0.05
14	0.03	8	0.04	8	0.05	8	0.04	24	0.05
15	0.04	8	0.05	8	0.04	8	0.05	24	0.06
16	0.01	8	0.02	8	0.05	8	0.03	24	0.07
17	0.04	8	0.03	8	0.05	8	0.04	24	0.07
18	0.04	8	0.03	8	0.05	8	0.04	24	0.06
19	0.04	8	0.06	8	0.06	8	0.05	24	0.07
20	0.04	8	0.04	8	0.05	8	0.04	24	0.06
21	0.03	8	0.03	2	0.02	8	0.03	18	0.04
22	0.01	8	0.02	8	0.04	8	0.03	24	0.05
23	0.01	8	0.03	8	0.04	8	0.03	24	0.07
24	0.03	8	0.01	8	0.01	8	0.02	24	0.03
25	0.01	8	0.01	8	0.03	8	0.02	24	0.05
26	0.04	8	0.02	8	0.03	8	0.03	24	0.05
27	0.02	8	0.02	8	0.04	8	0.03	24	0.04
28	0.03	8	0.03	8	0.04	8	0.03	24	0.06
29	0.02	8	0.02	8	0.03	8	0.02	24	0.04
30	0.01	8	0.03	8	0.04	8	0.03	24	0.05
31	0.03	8	0.03	8	0.04	8	0.04	24	0.05

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.10 ON DAY 11 2301 - 2400 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

E 9 / E 11 / NE 5

PEAK CALENDAR DAY AVG. 0.06 ON DAY 3

ARITHMETIC MEAN 0.04 NO. RDGS. 738 HRS. (%OPER. 99.19%)

## COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR 0.21	0	0.0
24-HOUR 0.11	0	0.0

COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	0	0.0	0.0
0.001 - 0.110	738	100.0	100.0
0.111 - 0.210	0	0.0	100.0
0.211 - 0.420	0	0.0	100.0
0.421 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



# OXIDES OF NITROGEN - NO2 SUMU

PPM ONE HOUR AVERAGE

MCNTH MAR. 79

8 D A Y	1	2	3	4	5	6	7	8	9	10	11	12
1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07
2	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.03	0.04	0.05	0.05	0.05
3	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.07
4	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.05	0.06	0.05	0.06	0.06
5	0.04	0.04	0.05	0.04	0.03	0.03	0.04	0.05	0.05	0.03	0.02	0.03
6	0.06	0.05	0.03	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.05	0.07
7	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
8	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03
9	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.05	0.05
10	0.06	0.06	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05
11	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.00	0.00	0.00
12	0.07	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
13	0.04	0.04	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.03	0.03
14	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.05	0.05	0.04	0.04
15	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.06
16	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.03	0.04	0.02	0.02	0.02
17	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.03	0.02
18	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05
19	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.06
20	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.04
21	0.03	0.02	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.03	*****	*****
22	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.03	0.02	0.02	0.02
23	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03
24	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01
25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
26	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02
27	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02
28	0.04	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.03
29	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
30	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03
31	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
D A Y	13	14	15	16	17	18	19	20	21	22	23	24
1	0.08	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.02
2	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
3	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.08	0.08	0.07	0.06	0.06
4	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
5	0.03	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
6	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.07	0.06	0.06	0.06	0.05
7	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02
8	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
9	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
10	0.06	0.06	0.06	0.04	0.04	0.04	0.04	0.05	0.06	0.06	0.06	0.06
11	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10
12	0.03	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.04
13	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.04	0.03	0.03	0.03
14	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
15	0.05	0.06	0.05	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.02
16	0.02	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.06	0.06	0.05	0.05
17	0.02	0.02	0.02	0.02	0.02	0.04	0.07	0.07	0.06	0.05	0.05	0.05
18	0.03	0.02	0.02	0.02	0.02	0.03	0.05	0.06	0.06	0.05	0.05	0.05
19	0.07	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
20	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.06	0.06	0.05	0.03
21	*****	*****	*****	*****	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
22	0.03	0.03	0.02	0.03	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
23	0.02	0.02	0.02	0.06	0.07	0.06	0.05	0.05	0.04	0.03	0.02	0.03
24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
25	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.05	0.05	0.05	0.05
26	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.05	0.04	0.02	0.02	0.03
27	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
28	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.06	0.06	0.05	0.05	0.04
29	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.03	0.02	0.02
30	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.04	0.04	0.05
31	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.04	0.03	0.04



OXIDES OF NITROGEN - NO2 SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	7	5.7
NE	2	1.6
E	5	4.1
SE	14	11.4
S	28	22.8
SW	34	27.6
W	20	16.3
NW	7	5.7
CALM	6	4.9
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	7	12.7
NE	49	2	4.1
E	67	5	7.5
SE	88	14	15.9
S	129	28	21.7
SW	95	34	35.8
W	88	20	22.7
NW	123	7	5.7
CALM	44	6	13.6
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.06

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU







# OXIDES OF NITROGEN - NO SUMU

PPM ONE HOUR AVERAGE

9

MCNTH MAR. 79

	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
DAY	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	0.03	8	0.05	8	0.03	8	0.04	24	0.09
2	0.02	8	0.05	8	0.05	8	0.04	24	0.08
3	0.03	8	0.07	8	0.19	8	0.10	24	0.22
4	0.07	8	0.04	8	0.02	8	0.04	24	0.20
5	0.05	8	0.04	8	0.45	8	0.18	24	0.63
6	0.11	8	0.09	8	0.06	8	0.09	24	0.41
7	0.06	8	0.04	8	0.01	8	0.04	24	0.10
8	0.03	8	0.02	8	0.02	8	0.02	24	0.03
9	0.01	8	0.05	8	0.13	8	0.07	24	0.21
10	0.05	8	0.03	8	0.11	8	0.06	24	0.22
11	0.11	8	0.07	8	0.12	8	0.10	24	0.21
12	0.02	8	0.02	8	0.00	8	0.01	24	0.03
13	0.03	8	0.01	8	0.00	8	0.01	24	0.12
14	0.01	8	0.01	8	0.07	8	0.03	24	0.17
15	0.10	8	0.09	8	0.08	8	0.09	24	0.21
16	0.02	8	0.02	8	0.21	8	0.08	24	0.47
17	0.26	8	0.04	8	0.25	8	0.18	24	0.50
18	0.15	8	0.06	8	0.11	8	0.11	24	0.32
19	0.12	8	0.06	8	0.14	8	0.12	24	0.28
20	0.08	8	0.03	8	0.04	8	0.05	24	0.20
21	0.11	8	0.07	2	0.02	8	0.06	18	0.51
22	0.04	8	0.01	8	0.04	8	0.03	24	0.16
23	0.02	8	0.02	8	0.03	8	0.02	24	0.04
24	0.03	8	0.01	8	0.00	8	0.01	24	0.04
25	0.00	8	0.00	8	0.02	8	0.01	24	0.06
26	0.03	8	0.00	8	0.01	8	0.01	24	0.05
27	0.00	8	0.00	8	0.00	8	0.00	24	0.01
28	0.00	8	0.01	8	0.12	8	0.04	24	0.27
29	0.01	8	0.00	8	0.01	8	0.01	24	0.04
30	0.01	8	0.00	8	0.01	8	0.01	24	0.01
31	0.01	8	0.01	8	0.01	8	0.01	24	0.06

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.63 ON DAY 5 1701 - 1800 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

W 20 / W 20 / W 22

PEAK CALENDAR DAY AVG. 0.18 ON DAY 17

ARITHMETIC MEAN 0.05 NO. RDGS. 738 HRS. (%OPER. 99.19%)

POLLUTANT NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS) REGULATIONS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	140	19.0	19.0
0.001 - 0.110	496	67.2	86.2
0.111 - 0.210	56	7.6	93.8
0.211 - 0.420	38	5.1	98.9
0.421 OR OVER	8	1.1	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## OXIDES OF NITROGEN - NO SUMU

PPM ONE HOUR AVERAGE

MCNTH MAR. 79

9 D A Y	1	2	3	4	5	6	7	8	9	10	11	12
1	0.05	0.03	0.01	0.01	0.04	0.03	0.04	0.06	0.09	0.09	0.05	0.03
2	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.08	0.05	0.06	0.06
3	0.02	0.03	0.03	0.03	0.02	0.01	0.02	0.04	0.05	0.05	0.06	0.07
4	0.20	0.14	0.09	0.03	0.02	0.02	0.02	0.02	0.04	0.07	0.08	0.04
5	0.02	0.02	0.02	0.02	0.01	0.02	0.05	0.21	0.08	0.01	0.02	0.02
6	0.20	0.03	0.03	0.03	0.03	0.04	0.09	0.41	0.28	0.09	0.09	0.04
7	0.07	0.06	0.05	0.05	0.05	0.05	0.05	0.10	0.06	0.06	0.06	0.05
8	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02
9	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.05	0.07	0.06	0.08
10	0.15	0.12	0.06	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03
11	0.17	0.17	0.13	0.10	0.07	0.04	0.06	0.14	0.05	0.07	0.05	0.06
12	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.02	0.03	0.03	0.02	0.01
13	0.01	0.01	0.01	0.00	0.01	0.01	0.07	0.12	0.02	0.01	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.02	0.01	0.01	0.01
15	0.09	0.10	0.08	0.06	0.06	0.08	0.11	0.21	0.19	0.14	0.11	0.07
16	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.01	0.02
17	0.36	0.32	0.24	0.21	0.21	0.22	0.22	0.32	0.15	0.07	0.03	0.02
18	0.27	0.32	0.18	0.09	0.08	0.11	0.10	0.08	0.08	0.07	0.07	0.03
19	0.13	0.10	0.10	0.10	0.10	0.10	0.12	0.13	0.16	0.12	0.11	0.08
20	0.05	0.05	0.04	0.05	0.06	0.09	0.07	0.20	0.10	0.04	0.01	0.01
21	0.02	0.02	0.02	0.03	0.04	0.07	0.16	0.51	0.10	0.03	*****	*****
22	0.02	0.02	0.02	0.02	0.02	0.03	0.06	0.16	0.02	0.02	0.02	0.01
23	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02
24	0.03	0.03	0.03	0.04	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.05	0.05	0.02	0.01	0.00	0.03	0.04	0.04	0.01	0.01	0.00	0.00
27	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
29	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
31	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.02	0.01	0.00	0.00
D A Y	13	14	15	16	17	18	19	20	21	22	23	24
1	0.03	0.03	0.03	0.01	0.02	0.03	0.08	0.06	0.03	0.01	0.01	0.01
2	0.04	0.04	0.03	0.03	0.04	0.05	0.07	0.08	0.04	0.03	0.03	0.03
3	0.05	0.07	0.09	0.10	0.09	0.22	0.21	0.22	0.20	0.21	0.18	0.22
4	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
5	0.02	0.02	0.02	0.12	0.24	0.63	0.63	0.63	0.53	0.33	0.41	0.22
6	0.04	0.05	0.05	0.07	0.08	0.07	0.04	0.05	0.07	0.07	0.05	0.06
7	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
8	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.01
9	0.06	0.04	0.04	0.03	0.07	0.10	0.10	0.08	0.12	0.21	0.21	0.17
10	0.03	0.04	0.03	0.02	0.02	0.02	0.04	0.03	0.15	0.21	0.22	0.17
11	0.07	0.08	0.11	0.11	0.11	0.10	0.21	0.19	0.13	0.10	0.12	0.01
12	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
14	0.01	0.01	0.01	0.02	0.02	0.03	0.12	0.17	0.07	0.04	0.04	0.05
15	0.05	0.05	0.04	0.03	0.05	0.06	0.10	0.18	0.15	0.04	0.02	0.03
16	0.02	0.02	0.02	0.02	0.01	0.02	0.10	0.29	0.47	0.14	0.30	0.31
17	0.02	0.01	0.01	0.01	0.02	0.01	0.13	0.26	0.42	0.50	0.34	0.28
18	0.04	0.06	0.06	0.07	0.08	0.08	0.11	0.11	0.12	0.12	0.11	0.14
19	0.06	0.07	0.07	0.06	0.06	0.06	0.11	0.11	0.19	0.28	0.19	0.09
20	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.07	0.05	0.05	0.04	0.02
21	*****	*****	*****	*****	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02
22	0.02	0.00	0.02	0.00	0.01	0.05	0.06	0.07	0.04	0.02	0.02	0.03
23	0.01	0.01	0.01	0.02	0.03	0.03	0.02	0.01	0.02	0.02	0.04	0.03
24	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.02	0.03	0.06
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
28	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.09	0.27	0.22	0.21	0.17
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.00
30	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
31	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.02	0.01



OXIDES OF NITROGEN - NO SUMU

FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	5	4.2
NE	4	3.3
E	12	10.0
SE	23	19.2
S	22	18.3
SW	16	13.3
W	17	14.2
NW	12	10.0
CALM	9	7.5
INDP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	5	9.1
NE	49	4	8.2
E	67	12	17.9
SE	88	23	26.1
S	129	22	17.1
SW	95	16	16.8
W	88	17	19.3
NW	123	12	9.8
CALM	44	9	20.5
INDP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.10

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU







## SULFUR DIOXIDE SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

DAY	0001-0800 AVE. NO.		0801-1600 AVE. NO.		1601-2400 AVE. NO.		FULL DAY AVE. NO.		DAILY PEAK
1	0.00	8	0.00	8	0.00	8	0.00	24	0.01
2	0.00	8	0.00	8	0.00	8	0.00	24	0.00
3	0.00	8	0.00	8	0.01	8	0.00	24	0.01
4	0.00	8	0.00	8	0.00	8	0.00	24	0.01
5	0.00	8	0.00	8	0.02	8	0.01	24	0.03
6	0.01	8	0.01	6	0.00	8	0.00	22	0.02
7	0.00	8	0.00	8	0.00	8	0.00	24	0.00
8	0.00	8	0.00	8	0.00	8	0.00	24	0.00
9	0.00	8	0.00	8	0.01	8	0.00	24	0.02
10	0.01	8	0.00	8	0.01	8	0.01	24	0.02
11	0.01	8	0.00	8	0.00	8	0.01	24	0.02
12	0.00	8	0.00	8	0.00	8	0.00	24	0.00
13	0.00	8	0.00	8	0.00	8	0.00	24	0.00
14	0.00	8	0.00	8	0.00	8	0.00	24	0.00
15	0.00	8	0.00	8	0.00	8	0.00	24	0.01
16	0.00	8	0.00	8	0.00	8	0.00	24	0.00
17	0.01	8	0.00	8	0.01	8	0.00	24	0.02
18	0.00	8	0.00	8	0.00	8	0.00	24	0.01
19	0.00	8	0.00	8	0.00	8	0.00	24	0.01
20	0.00	8	0.00	5	0.00	8	0.00	21	0.01
21	0.00	8	0.00	8	0.00	8	0.00	24	0.02
22	0.00	8	0.00	8	0.00	8	0.00	24	0.00
23	0.00	8	0.00	8	0.00	8	0.00	24	0.00
24	0.00	8	0.00	8	0.00	8	0.00	24	0.00
25	0.00	8	0.00	8	0.00	8	0.00	24	0.00
26	0.00	8	0.00	8	0.00	8	0.00	24	0.00
27	0.00	8	0.00	8	0.00	8	0.00	24	0.00
28	0.00	8	0.00	8	0.00	8	0.00	24	0.01
29	0.00	8	0.00	8	0.00	8	0.00	24	0.01
30	0.00	8	0.00	8	0.00	8	0.00	24	0.00
31	0.00	8	0.00	8	0.00	8	0.00	24	0.00

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 0.03 ON DAY 5 1901 - 2000 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

W 22 / W 25 / W 16

PEAK CALENDAR DAY AVG. 0.01 ON DAY 5

ARITHMETIC MEAN 0.00 NO. RDGS. 739 HRS. (%OPER. 99.33%)

## COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR 0.17	0	0.0
24-HOUR 0.06	0	0.0

COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	641	86.7	86.7
0.001 - 0.060	98	13.3	100.0
0.061 - 0.170	0	0.0	100.0
0.171 - 0.340	0	0.0	100.0
0.341 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## SULFUR DIOXIDE SUMU

PPM ONE HOUR AVERAGE

MCNTH MAR. 79

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SULFUR DIOXIDE SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	3	3.1
NE	0	0.0
E	3	3.1
SE	12	12.2
S	14	14.3
SW	25	25.5
W	18	18.4
NW	13	13.3
CALM	10	10.2
INOP	0	0.0

FREQUENCY OF READINGS WITH WIND DIRECTION

WIND DIRECTION	HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	3	5.5
NE	49	0	0.0
E	67	3	4.5
SE	89	12	13.5
S	127	14	11.0
SW	94	25	26.6
W	89	18	20.2
NW	123	13	10.6
CALM	46	10	21.7
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.00

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU







OZONE SUMU  
PPHM ONE HOUR AVERAGE  
MCHNTH MAR. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	2.50	8	3.25	8	2.88	8	2.98	24	4.0
2	2.25	8	1.63	8	0.81	8	1.56	24	3.0
3	0.38	8	1.44	8	0.13	8	0.65	24	1.5
4	0.31	8	2.25	8	3.06	8	1.88	24	4.5
5	0.88	8	3.00	8	0.19	8	1.35	24	4.0
6	0.50	8	1.69	8	0.44	8	0.88	24	3.0
7	0.88	8	3.38	8	3.50	8	2.58	24	4.0
8	4.38	8	3.75	8	1.88	8	3.33	24	4.5
9	1.88	8	1.38	8	0.25	8	1.17	24	2.5
10	1.06	8	2.63	8	1.69	8	1.79	24	4.0
11	0.00	8	3.25	8	1.00	8	1.42	24	6.0
12	2.75	8	3.94	8	3.00	8	3.23	24	4.5
13	1.75	8	3.25	8	2.44	8	2.48	24	4.0
14	2.25	8	2.44	8	0.44	8	1.71	24	3.5
15	0.00	8	1.00	8	1.00	8	0.67	24	3.0
16	3.75	8	3.31	8	0.75	8	2.60	24	4.5
17	0.00	8	3.00	8	1.06	8	1.35	24	5.0
18	0.00	8	2.56	8	1.25	8	1.27	24	5.0
19	0.00	8	2.00	8	0.56	8	0.85	24	5.0
20	0.00	8	2.75	8	1.63	8	1.46	24	4.0
21	1.13	8	2.30	5	3.63	8	2.36	21	4.5
22	2.19	8	2.88	8	0.94	8	2.00	24	3.5
23	2.81	8	2.69	8	1.75	8	2.42	24	3.5
24	2.44	8	3.75	8	3.19	8	3.13	24	5.0
25	4.00	8	4.13	8	1.69	8	3.27	24	4.5
26	0.06	8	3.63	8	3.19	8	2.29	24	4.5
27	1.88	8	3.69	8	2.38	8	2.65	24	4.0
28	1.63	8	3.13	8	1.13	8	1.96	24	3.5
29	2.94	8	4.00	8	3.06	8	3.33	24	4.0
30	3.06	8	3.06	8	1.75	8	2.63	24	3.5
31	1.31	8	2.50	8	1.94	8	1.92	24	3.5

SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 6.0 ON DAY 11 1501 - 1600 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

SE 9 / C 0 / S 1

PEAK CALENDAR DAY AVG. 3.33 ON DAY 29

ARITHMETIC MEAN 2.03 NO. RDGS. 741 HRS. (%OPER. 99.60%)

COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS		NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR	5.10	1	0.1
24-HOUR	1.50	20	64.8

COMPARISON TO 24-HOUR REGULATION WAS ON A CALENDAR DAY BASIS ONLY

FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	158	21.3	21.3
0.001 - 1.500	160	21.6	42.9
1.501 - 5.100	422	57.0	99.9
5.101 - 8.100	1	0.1	100.0
8.101 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



OZONE SUMU  
PPHM ONE HOUR AVERAGE  
MONTH MAR. 79

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	1	2	3	4	5	6	7	8	9	10	11	12
1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0	3.0	3.0
2	3.0	3.0	1.5	3.0	3.0	1.5	2.5	0.5	0.5	0.5	1.0	1.5
3	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	1.5	1.5
4	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	2.0
5	1.0	0.5	0.0	0.5	2.0	2.0	1.0	0.0	1.0	2.0	3.0	3.0
6	0.0	0.5	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.5	1.0	2.5
7	1.0	0.5	0.5	0.5	0.0	1.5	1.5	1.5	2.0	2.5	3.0	3.5
8	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0	4.0
9	2.5	2.5	2.5	2.5	2.0	1.5	1.0	0.5	0.5	0.5	1.0	1.0
10	0.0	0.0	0.0	1.5	1.5	1.5	1.5	2.5	2.5	2.0	2.5	2.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0	3.0	3.0
12	2.0	3.0	2.0	2.5	3.0	3.0	3.0	3.5	3.5	3.5	4.0	4.0
13	2.0	2.0	2.5	2.5	2.0	2.0	1.0	0.0	1.0	2.0	3.5	3.5
14	2.5	3.0	3.0	3.0	2.0	2.0	1.5	1.0	1.0	1.5	2.0	2.5
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0
16	3.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	2.0	1.5	3.0	3.5
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0	3.5
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	2.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.5
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.5
21	2.0	2.5	2.0	2.0	0.5	0.0	0.0	0.0	0.5	2.0	2.5	3.0
22	3.0	3.0	3.0	3.0	2.5	2.0	1.0	0.0	2.0	2.5	3.0	3.0
23	1.0	2.0	3.5	3.5	3.5	3.5	3.5	2.0	2.5	2.5	2.5	2.5
24	2.0	1.5	1.5	0.5	1.5	3.0	4.5	5.0	5.0	5.0	4.5	3.5
25	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0
26	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.0	2.5	3.5	4.0
27	3.0	2.0	1.5	1.5	2.0	1.5	1.5	2.0	3.0	3.0	4.0	4.0
28	1.5	1.0	1.5	1.5	3.0	2.0	2.0	0.5	3.0	3.5	3.5	3.0
29	0.0	2.0	3.0	3.5	4.0	4.0	3.5	3.5	4.0	4.0	4.0	4.0
30	3.5	3.5	3.5	3.5	3.0	3.0	2.5	2.0	2.0	2.5	3.0	3.0
31	0.0	0.5	1.5	2.0	1.0	2.0	1.5	2.0	1.0	1.0	2.0	2.5

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	13	14	15	16	17	18	19	20	21	22	23	24
1	3.0	3.5	4.0	3.5	3.0	2.5	3.0	3.0	3.0	3.0	3.0	2.5
2	2.0	2.5	2.5	2.5	1.5	1.0	0.0	0.0	1.0	1.0	1.0	1.0
3	1.5	1.5	1.5	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	2.5	3.0	3.5	4.0	4.5	4.5	4.0	3.5	3.0	2.0	2.0	1.0
5	3.5	4.0	4.0	3.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	3.0	3.0	2.0	1.5	0.5	0.0	1.0	1.0	0.5	0.0	0.0	0.5
7	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0
8	4.0	4.0	3.0	3.0	2.5	2.5	2.0	1.0	1.5	1.5	2.0	2.0
9	1.5	2.0	2.0	2.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10	2.5	2.5	3.0	4.0	4.0	3.5	3.0	2.0	1.0	0.0	0.0	0.0
11	3.5	3.5	4.5	6.0	3.5	2.0	0.5	0.0	0.0	0.5	0.5	1.0
12	4.0	4.5	4.0	4.0	4.0	4.0	3.0	2.5	2.5	3.0	2.5	2.5
13	4.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.5	2.5	2.5	2.0
14	2.5	3.0	3.5	3.5	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
15	2.0	1.5	1.5	1.5	1.0	0.5	0.0	0.0	0.0	1.0	2.5	3.0
16	4.0	4.5	4.0	4.0	3.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0
17	4.0	4.0	5.0	5.0	4.5	3.5	0.5	0.0	0.0	0.0	0.0	0.0
18	3.5	4.0	5.0	5.0	4.5	4.0	1.0	0.5	0.0	0.0	0.0	0.0
19	2.0	2.5	3.5	5.0	3.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
20	3.5	4.0	4.0	4.0	4.0	4.0	2.5	0.0	0.0	0.0	0.5	2.0
21	3.5	****	****	****	4.0	4.5	4.5	3.5	4.0	3.5	3.0	2.0
22	3.0	3.0	3.5	3.0	3.0	0.5	0.0	0.0	0.0	1.5	1.5	1.0
23	3.0	3.0	3.5	2.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0
24	3.5	3.5	3.5	1.5	3.0	3.5	3.0	3.0	3.0	3.0	3.5	3.5
25	4.5	4.5	4.5	4.5	4.5	4.0	3.0	1.5	0.0	0.5	0.0	0.0
26	4.0	4.0	4.5	4.5	4.5	4.0	3.5	0.5	2.5	3.5	4.0	3.0
27	4.0	4.0	4.0	3.5	3.5	3.5	3.0	1.5	1.5	1.5	2.0	2.5
28	3.0	3.0	3.0	3.0	3.5	3.0	2.5	0.0	0.0	0.0	0.0	0.0
29	4.0	4.0	4.0	4.0	4.0	3.5	3.5	2.5	2.0	2.0	3.5	3.5
30	3.5	3.5	3.5	3.5	3.0	2.5	2.0	1.5	1.5	1.5	1.5	0.5
31	3.0	3.5	3.5	3.5	3.0	2.5	2.5	1.5	1.5	1.5	2.0	1.0



OZONE SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	49	8.4
NE	44	7.5
E	53	9.1
SE	52	8.9
S	90	15.4
SW	79	13.6
W	72	12.3
NW	108	18.5
CALM	36	6.2
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	49	89.1
NE	49	44	89.8
E	67	53	79.1
SE	89	52	58.4
S	129	90	69.8
SW	95	79	83.2
W	88	72	81.8
NW	123	108	87.8
CALM	46	36	78.3
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 0.0

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU





## TOTAL HYDROCARBON SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

DAY	0001-0800		0801-1600		1601-2400		FULL DAY		DAILY
	AVE. NO.		AVE. NO.		AVE. NO.		AVE. NO.		PEAK
1	1.50	8	1.50	8	1.50	8	1.50	24	1.5
2	1.81	8	2.00	8	2.00	8	1.94	24	4.0
3	1.50	8	2.06	8	1.94	8	1.83	24	6.0
4	1.63	8	1.56	8	1.50	8	1.56	24	2.0
5	1.69	8	1.56	8	3.13	8	2.13	24	6.0
6	1.88	8	1.83	6	1.50	8	1.73	22	3.0
7	1.56	8	1.50	8	1.50	8	1.52	24	2.0
8	1.50	8	1.50	8	1.56	8	1.52	24	2.0
9	1.50	8	1.56	8	1.94	8	1.67	24	2.0
10	1.56	8	1.69	8	1.81	8	1.69	24	2.5
11	2.31	8	1.50	8	1.50	8	1.77	24	3.5
12	1.50	8	1.50	8	1.50	8	1.50	24	1.5
13	1.56	8	1.50	8	1.50	8	1.52	24	2.0
14	1.50	8	1.50	8	1.50	8	1.50	24	1.5
15	1.63	8	1.50	8	1.63	8	1.58	24	2.0
16	1.50	8	1.50	8	2.31	8	1.77	24	3.5
17	3.50	8	1.88	8	2.69	8	2.69	24	4.5
18	2.81	8	1.88	8	2.00	8	2.23	24	3.0
19	1.94	8	1.50	8	1.94	8	1.79	24	3.0
20	2.00	8	1.56	8	1.75	8	1.77	24	2.0
21	2.00	8	1.69	8	1.50	8	1.73	24	4.0
22	1.56	8	1.50	8	1.50	8	1.52	24	2.0
23	1.50	8	1.50	8	1.50	8	1.50	24	1.5
24	1.50	8	1.50	8	1.50	8	1.50	24	1.5
25	1.50	8	1.50	8	1.50	8	1.50	24	1.5
26	2.00	8	1.50	8	1.50	8	1.67	24	2.0
27	1.50	8	1.63	8	1.56	8	1.56	24	2.5
28	1.50	8	1.50	8	2.00	8	1.67	24	2.5
29	1.56	8	1.50	8	1.50	8	1.52	24	2.0
30	1.50	8	1.50	8	1.50	8	1.50	24	1.5
31	1.50	8	1.50	8	1.94	8	1.65	24	2.0

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 6.0 ON DAY 3 1101 - 1200 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

SW 20 / SW 22 / SW 22

PEAK CALENDAR DAY AVG. 2.69 ON DAY 17

ARITHMETIC MEAN 1.69 NO. RDGS. 742 HRS. (%OPER. 99.73%)

POLLUTANT NOT SPECIFIED IN THE CLEAN AIR (MAXIMUM LEVELS) REGULATIONS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	0	0.0	0.0
0.001 - 1.500	585	78.8	78.8
1.501 - 3.999	148	19.9	98.8
4.000 - 7.999	9	1.2	100.0
8.000 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## TOTAL HYDROCARBON SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

13  
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Y

	1	2	3	4	5	6	7	8	9	10	11	12
1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
2	1.5	3.0	1.5	1.5	1.5	1.5	2.0	2.0	3.0	3.0	2.0	2.0
3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	6.0
4	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5
5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	2.0	1.5	1.5	1.5
6	3.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	2.0	1.5	***
7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5	1.5	1.5	1.5
8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
9	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5
10	2.0	2.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
11	1.5	2.0	2.0	2.0	1.5	3.5	3.0	3.0	1.5	1.5	1.5	1.5
12	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	1.0	1.5
14	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
15	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	1.5	1.5	1.5
16	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
17	3.5	3.5	3.5	3.0	3.0	3.5	3.5	4.5	3.5	2.5	1.5	1.5
18	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	1.5	1.5	1.5
19	2.0	2.0	2.0	2.0	2.0	2.0	1.5	2.0	1.5	1.5	1.5	1.5
20	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	1.5
21	1.5	1.5	1.5	1.5	2.0	2.0	2.0	4.0	3.0	1.5	1.5	1.5
22	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5	1.5	1.5	1.5
23	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
25	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
26	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	1.5	1.5
27	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	1.5
28	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
29	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
30	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
31	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

D  
A  
Y

	13	14	15	16	17	18	19	20	21	22	23	24
1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	4.0
3	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	6.0	4.0	4.0	2.0	3.0
6	***	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5	1.5	1.5
9	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0	2.0	2.0	2.0
10	2.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.5	2.5
11	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
12	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
13	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
14	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
15	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	1.5	1.5
16	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	3.5	2.5	2.5	3.5
17	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	3.0	4.5	4.0	3.0
18	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
19	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0
20	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	1.5	1.5
21	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
22	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
23	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
25	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
26	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
27	1.5	1.5	1.5	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
28	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5
29	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
30	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
31	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0



TOTAL HYDROCARBON SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT OCC. HOURS	FREQUENCY OF OCCURRENCE %
N	3	5.4
NE	2	3.6
E	0	0.0
SE	8	14.3
S	9	16.1
SW	4	7.1
W	13	23.2
NW	9	16.1
CALM	8	14.3
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH HOURS OF WIND OCCURRENCE	WIND DIRECTION HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	3	5.5
NE	49	2	4.1
E	67	0	0.0
SE	89	8	9.0
S	130	9	6.9
SW	94	4	4.3
W	89	13	14.6
NW	123	9	7.3
CALM	46	8	17.4
INOP	0	0	0.0

NOTE. 1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE THOSE GREATER THAN 2.0

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT ST ALBERT SUMU





## CARBON MONOXIDE SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

DAY	0001-0800 AVE. NO.		0801-1600 AVE. NO.		1601-2400 AVE. NO.		FULL DAY AVE. NO.	DAILY PEAK	
1	0.63	8	0.75	8	0.56	8	0.65	24	1.0
2	0.56	8	0.81	8	1.00	8	0.79	24	1.0
3	0.56	8	1.38	8	2.88	8	1.60	24	4.0
4	0.69	8	1.13	8	0.50	8	0.77	24	2.0
5	0.88	8	0.88	8	3.81	8	1.85	24	6.0
6	1.69	8	2.13	8	0.75	8	1.52	24	6.0
7	0.25	8	0.50	8	0.25	8	0.33	24	1.5
8	0.06	8	0.00	8	0.31	8	0.13	24	0.5
9	0.06	8	0.81	8	1.81	8	0.90	24	3.0
10	1.19	8	0.94	8	1.38	8	1.17	24	3.0
11	1.13	8	0.75	8	0.88	8	0.92	24	1.5
12	0.00	8	0.00	8	0.38	8	0.13	24	0.5
13	0.81	8	0.63	8	0.44	8	0.63	24	2.5
14	0.19	8	0.13	8	0.69	8	0.33	24	1.0
15	0.88	8	1.19	8	1.31	8	1.13	24	3.0
16	0.56	8	0.44	8	2.13	8	1.04	24	5.0
17	2.13	8	0.69	8	2.75	8	1.85	24	5.5
18	1.50	8	0.38	8	0.31	8	0.73	24	2.5
19	0.25	8	1.06	8	1.31	8	0.88	24	2.0
20	0.31	8	0.81	8	0.63	8	0.58	24	1.5
21	0.50	8	0.88	8	0.63	8	0.67	24	3.5
22	0.31	8	0.56	8	0.88	8	0.58	24	2.0
23	0.13	8	0.06	8	0.50	8	0.23	24	0.5
24	0.31	8	0.00	8	0.25	8	0.19	24	0.5
25	0.00	8	0.00	8	0.50	8	0.17	24	0.5
26	0.44	8	0.50	8	0.44	8	0.46	24	1.5
27	0.06	8	0.25	8	0.63	8	0.31	24	1.0
28	0.06	8	0.69	8	1.56	8	0.77	24	3.5
29	0.13	8	0.06	8	0.31	8	0.17	24	1.0
30	0.00	8	0.00	8	0.50	8	0.17	24	0.5
31	0.13	8	0.44	8	0.69	8	0.42	24	1.0

## SUMMARY OF PEAK READINGS, PEAK AVERAGES, MONTHLY STATS

PEAK HOURLY READING 6.0 ON DAY 5 1901 - 2000 HOURS

WIND READINGS HOUR BEFORE/DURING /AFTER PEAK HOURLY READING

W 22 / W 25 / W 16

PEAK 8-HR. AVG. 3.81 ON DAY 5

ARITHMETIC MEAN 0.71 NO. RDGS. 744 HRS. (%OPER. 100.00%)

## COMPARISON TO CLEAN AIR (MAXIMUM LEVELS) REGULATION

REGULATIONS	NO. IN EXCESS OF REGULATION	% OF TIME PER MONTH THAT REG. WAS EXCEEDED
1-HOUR 13.00	0	0.0
8-HOUR 5.00	0	0.0

COMPARISON TO 8-HOUR REGULATION WAS ON THE TIME PERIODS AS INDICATED IN THE ABOVE COLUMNS

## FREQUENCY DISTRIBUTION

RANGE	NO. OF RDGS.	PERCENT	CUMULATIVE
0.0 - 0.000	210	28.2	28.2
0.001 - 1.500	469	63.0	91.3
1.501 - 5.000	61	8.2	99.5
5.001 - 13.000	4	0.5	100.0
13.001 OR OVER	0	0.0	100.00

ALL MEANS ARE ARITHMETIC UNLESS OTHERWISE SPECIFIED



## CARBON MONOXIDE SUMU

PPM ONE HOUR AVERAGE

MONTH MAR. 79

14  
D  
A  
Y

	1	2	3	4	5	6	7	8	9	10	11	12
1	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5
3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.5
4	1.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	2.0	2.0	1.0
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.5	3.0	1.0	0.5	0.5
6	2.0	1.0	0.5	0.5	1.0	1.0	1.5	6.0	6.0	2.0	2.5	2.0
7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	0.5	0.5	0.5
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	0.5	1.5	0.5
10	2.5	2.0	1.5	1.0	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
11	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.5	1.0	1.0	0.5	0.5
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.5	0.5	0.5	0.5	0.5	0.5	1.0	2.5	1.0	1.0	0.5	0.5
14	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	0.5	0.5	0.0	0.0
15	1.0	1.0	0.5	0.5	0.5	0.5	1.0	2.0	2.0	1.5	1.0	1.0
16	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	0.5	0.5	0.0
17	3.0	3.0	2.5	2.0	1.5	1.5	1.5	2.0	1.5	1.0	0.5	0.5
18	2.0	2.5	2.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
19	0.5	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.5	1.0	1.0	1.0
20	0.5	0.5	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.0	1.0	0.5
21	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.5	3.5	0.5	0.5	0.5
22	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0	0.5	0.5	0.5	0.5
23	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
24	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.5	0.5	0.0	0.0	0.0	0.5	0.5	1.5	0.5	0.5	0.5	0.5
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
29	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

D  
A  
Y

	13	14	15	16	17	18	19	20	21	22	23	24
1	0.5	0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	0.5	0.5	0.5
2	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
3	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.5	4.0	2.0	3.0
4	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.5	0.5	0.5	1.0	2.5	5.0	6.0	5.0	5.0	2.5	3.5
6	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
9	0.5	0.5	0.5	1.5	2.0	1.5	1.0	1.0	1.5	2.0	2.5	3.0
10	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	2.5	3.0	3.0
11	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.5	1.0	0.5	0.5	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
13	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.0	0.5	0.5	0.5
15	1.0	1.0	1.0	1.0	1.0	1.5	1.5	3.0	2.0	0.5	0.5	0.5
16	0.0	0.0	0.5	0.5	0.5	1.0	1.0	2.5	5.0	2.0	2.0	3.0
17	0.5	0.5	0.5	0.5	0.5	0.5	1.5	3.0	4.0	5.5	4.5	2.5
18	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
19	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.5	1.0	2.0	2.0	1.5
20	1.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	0.5	0.5	0.5	0.0
21	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5
22	0.5	0.5	0.5	1.0	1.0	1.5	1.5	1.0	0.5	0.5	0.5	0.5
23	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
24	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
26	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	0.5	0.0	0.0	0.0
27	0.0	0.5	0.5	0.5	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0
28	0.5	1.0	1.0	1.0	0.5	0.5	0.5	1.0	3.5	2.5	2.0	2.0
29	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
31	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	0.5	0.5	0.5	0.5



CARBON MONOXIDE SUMU  
FREQUENCY DISTRIBUTION TABLES

MONTH MAR. 79

PERCENT OF READINGS WITH WIND DIRECTION

WIND DIRECTION	POLLUTANT CCC. HOURS	FREQUENCY OF OCCURRENCE %
N	1	5.9
NE	0	0.0
E	0	0.0
SE	3	17.6
S	2	11.8
SW	3	17.6
W	5	29.4
NW	3	17.6
CALM	0	0.0
INOP	0	0.0

WIND DIRECTION	FREQUENCY OF READINGS WITH WIND DIRECTION HOURS OF WIND OCCURRENCE	HOURS OF READINGS	FREQUENCY OF READINGS WITH WIND
N	55	1	1.8
NE	49	0	0.0
E	67	0	0.0
SE	89	3	3.4
S	130	2	1.5
SW	96	3	3.1
W	89	5	5.6
NW	123	3	2.4
CALM	46	0	0.0
INOP	0	0	0.0

NOTE.1. READINGS CONSIDERED IN FREQUENCY DISTRIBUTION TABLES ARE  
THOSE GREATER THAN 3.0

2. VALUE OF \*\*\*\*\* INDICATES NO DATA AVAILABLE OR INSUFFICIENT DATA

3. WIND DATA UTILIZED FOR CORRELATION PURPOSES WAS MONITORED AT  
ST ALBERT SUMU





## COMBINED AIR QUALITY INDEX

ST. ALBE SUMU MAR. 1979

0-25 CLEAN AIR  
 26-50 LIGHT AIR POLLUTION  
 51-75 MODERATE AIR POLLUTION  
 76-100 HEAVY AIR POLLUTION  
 101 OR OVER SEVERE AIR POLLUTION

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DAY AVE
1	9	9	8	8	8	8	8	8	10	10	11	12	12	12	11	10	9	8	10	9	9	9	7	5	
2	5	5	4	5	5	3	4	4	5	6	7	8	10	9	10	10	10	13	12	8	9	10	7	8	
3	6	6	7	5	4	5	4	7	8	10	11	12	11	12	12	12	12	12	14	12	13	12	12	11	
4	9	9	6	5	5	6	5	5	8	9	9	9	11	12	11	11	11	11	10	9	8	6	6	5	
5	5	4	5	4	5	5	6	10	9	6	6	7	8	9	10	10	10	9	13	21	21	17	17	15	
6	14	8	6	6	6	6	7	19	18	9	11	13	13	12	11	11	10	10	11	9	6	6	6	5	
7	7	5	4	5	5	5	5	7	5	6	7	8	9	9	9	9	7	7	7	7	9	9	8	8	
8	8	8	10	9	8	8	7	8	8	8	8	9	9	3	6	7	6	6	5	4	5	4	4	4	
9	5	5	5	5	4	5	5	4	7	9	13	8	8	10	8	11	11	9	8	8	8	8	12	12	
10	12	10	8	7	6	6	6	8	8	8	9	8	10	10	11	10	10	9	8	7	8	11	12	14	
11	14	12	13	11	9	7	7	10	7	3	4	4	5	6	9	12	7	4	3	5	4	2	2	12	
12	9	9	7	8	8	8	8	9	8	8	9	9	9	9	8	8	9	9	8	7	7	7	7	7	
13	6	6	6	6	5	5	6	8	7	10	13	13	11	9	11	9	10	8	8	8	7	6	8	7	
14	6	6	6	6	5	5	5	7	8	8	6	7	7	8	9	10	8	7	6	7	7	6	6	6	
15	6	5	4	4	4	5	5	7	7	9	8	9	8	9	8	9	9	9	8	8	7	6	6	6	
16	6	7	7	7	7	7	7	9	8	4	6	7	8	9	8	9	9	8	7	10	13	10	9	10	
17	18	13	15	11	7	7	8	11	8	7	6	7	8	8	10	10	9	9	10	11	11	16	12	13	1
18	9	9	7	5	5	5	5	5	4	5	5	7	8	8	11	11	10	10	6	7	8	5	7	7	
19	4	4	4	4	4	4	5	7	8	6	8	9	10	10	13	17	12	8	9	10	7	7	7	9	
20	5	4	4	4	4	4	6	7	9	9	9	9	10	10	10	11	10	11	8	7	8	7	5	5	
21	5	5	4	4	3	4	5	12	16	6	4	5	6	1	1	1	10	12	12	9	9	8	7	5	
22	6	5	5	5	4	3	3	6	5	6	7	7	8	8	8	9	12	7	8	7	4	6	6	5	
23	4	4	6	6	6	6	6	4	5	6	6	7	7	6	7	8	9	10	7	8	7	5	4	5	
24	5	5	5	3	5	6	9	10	10	10	8	6	6	6	6	3	5	6	5	5	5	5	6	6	
25	7	7	7	7	7	7	9	11	8	5	7	7	8	8	8	9	9	8	8	6	5	5	5	5	
26	4	4	4	4	4	4	4	6	4	5	7	8	12	12	10	9	9	8	8	7	7	7	8	7	
27	6	4	4	4	4	4	5	5	6	6	8	8	8	8	9	8	10	10	9	6	6	6	5	6	
28	6	4	5	5	6	5	5	3	7	7	7	7	7	8	9	9	8	7	6	9	12	13	9	10	
29	5	5	7	8	11	9	8	7	8	8	8	8	8	8	8	8	8	7	8	6	6	5	7	7	
30	7	6	6	6	5	5	5	6	5	6	7	7	8	8	8	9	7	7	8	6	7	6	6	6	
31	5	5	5	5	4	5	5	5	5	5	6	7	7	8	8	8	8	9	9	8	7	6	5	5	
HR. AVE.	7	6	6	5	5	5	5	7	7	7	7	8	8	8	8	9	9	8	8	8	8	7	7	7	

MONTHLY AVERAGE = 7

MONTHLY PEAK = 21 DAY 5 2000 HOURS





N.L.C. - B.N.C.



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